



2017/2018 POTATO INDUSTRY REPORT



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POTATOES SOUTH AFRICA



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POTATOES SOUTH AFRICA





CONTENTS

Identity, Vision, Mission and Values	06
Report by the Chairperson	08
Chief Executive Officer's Report	10
Chief Financial Officer - Business Report	16
Industry Information	20
Research and Development	26
Marketing Division	30
Transformation	36





IDENTITY

The identity of Potatoes South Africa (PSA) is symbolised by:

- The authority of the potato industry which, in particular, refers to the annual turnover of the industry, measured against the total agricultural turnover which makes it a prominent role-player in agriculture and in the food value chain. In addition, potatoes constitute the biggest fresh vegetable crop in South Africa and represent more than 30% of the turnover of fresh produce markets.
- The solid character of potato producers, which is characteristic of high-risk takers who, at the same time, can cope with setbacks, remain optimistic and, most important of all, who are entrepreneurs, focussed on innovation and have solid values.
- The essence of the organisation is based on excellence in service delivery to all potato producers, as set out in its mission statement, as well as to all other role-players in the industry. The organisation aims to protect and promote the interests of potato producers in particular and the potato industry as a whole.
- The face of the organisation is representative of young, dynamic leadership, backed by passionate enthusiasm and the pursuance of stronger cohesion, as well as the ability to visualise the bigger agricultural picture and react to it with a clear vision, strong opinions, solid values, as well as the ability to establish a united front, representative of all role-players. The organisation's youthful character and approach create room for innovative thinking and proactive action – to the benefit of the potato industry as a whole. In addition, the organisation symbolises transparency, stability and sincerity in all its activities.

VISION

Together towards excellence in the potato industry.

MISSION

To provide strategic support services to a dynamic industry, thereby enhancing the sustainability of potato producers in South Africa,

- By providing the industry with industry-strategic knowledge and management support and support services with regard to South Africa's potato consumption.
- Providing producer development support services and business excellence.

VALUES

PSA pursues excellence in the following ways:

- Proactive
- Integrity
- Impartial
- Service excellence
- Collaborative



CHAIRPERSON'S REPORT



JF VAN DER MERWE

CHAIRPERSON

The past two seasons are characterised by unprecedented high production with 2017 as a record year. The 2018 harvest yield was not much less either. These excessive high volumes put pressure on the prices which in turn put financial pressure on potato producers. Due to economies of scale the number of potato producers is still decreasing, yet the hectares planted remained constant.

In the whole the potato industry in South Africa is healthy and unlike in Europe, where the demand is declining, the demand for potatoes is increasing continuously. Urbanisation of the population, the increased per capita income and the changing consumer preferences caused the growth in consumption. Potatoes South Africa (PSA) also performed a successful generic promotion campaign, specifically aimed at the middle and lower income groups. Regarding the higher income groups, there was a big breakthrough with the permission granted to use the Heart and Stroke Foundation's emblem on our advertising material. Time will tell, but with a consumer market that is becoming more health conscious, this should have a positive impact on consumption.

The majority of producers also succeeded in improving their efficiency. Here the pack house and water efficiency projects of PSA has great value. The satellite project which is still in its beginning phase, will bring forth further efficiency in production. South Africa is a country with rare resources. To survive, it must be optimally used and therefore the resources available for the potato industry must be further developed and expanded.

It can be said with pride that the South African potato producers can compete with the best in the world. The average yield in South Africa (47 tons per ha) compares well with, for example North America's 32 tons per ha in 2016.

The structure of PSA is constantly being adjusted to adapt to the changing environment. The current personnel structure is modified in such a way as to make specialist knowledge more regularly available to producers. With the modern technology available today, communication is so much easier, faster and accurate. A producer can, for example with a cell phone, send a photo to an expert who can quickly provide an answer or solution and the need to physically



have experts on the premises is decreasing. The daily market data provided to the producer also has great value.

The rest of the world is, however, swiftly busy to move away from fresh potatoes to frozen fries and other forms of processed potatoes. This trend is not yet visible here, but it does come with urbanisation of the population and changing consumer patterns. South Africa will not escape this. Although the current marketing programme is successful, an eye should be kept on this development in future. This also includes the shifting need of the consumer regarding cultivars and packaging. The resistance against the use of plastic can also have a big influence on the industry considering that most of the smaller packaging is in plastic bags. Paper is a good alternative and it also curbs greening.

The potato industry is a large provider of employment to unskilled labour. The minimum wage is still a source of concern and the trend is that more producers mechanise because the cost squeeze within the industry leaves producers with no other choice. Input cost for the producers also increases faster than inflation. The influence of mechanization on the potato industry will have a huge influence on many of the smaller towns in the country. In many of the towns potato producers are the largest employer and the social impact of this trend in rural areas should not be underestimated.

During the past year there was also an enormous effort to revive the fresh produce markets. With *Project Rebirth*, as it is commonly known, PSA attempts, along with the Department of Agriculture, Forestry and Fishery (DAFF), to bring all the role-players to work together to uplift the markets, which are the main price formers, to the standard it previously was. The South African producers are privileged to have this channel of marketing and the rest of the world envy us for it.

The potato industry is a dynamic industry and along with it, are the potato producers of South Africa very innovative. I am convinced that they will be able to face the challenges of the future. We have a remarkable industry!

JF Van der Merwe
Chairperson



CHIEF EXECUTIVE OFFICER'S REPORT



ANDRÉ JOOSTE (PHD)

CHIEF EXECUTIVE OFFICER

It is common for companies, institutions, and organizations to do strategic planning on a regular basis. The way your business is headed and is going to end up is the result of your continuous thinking processes and thereby incorporating, interpreting and converting information into intelligence.

Strategy is therefore not a once-off process, but a continuous process as new information comes to light. Regardless of your strategic goal, you should be able to adapt your tactics and actions to rapidly changing realities facing your business. The same principles apply to the agricultural sector and therefore to the potato industry.

PSA is well aware that market information and intelligence is the backbone of decision making. Therefore, efforts are constantly being made to better align the information sources and the variety of information with the needs of the industry. All workable and available communication channels are therefore used to make the market intelligence available as soon as possible. Of the channels used are cell phone SMS, WhatsApp messages, newsletters and the website.

The potato industry's research strategy was reviewed in October 2017 and for the next three to four years, the following aspects will be focused on:

- Cultivar evaluation to increase yield;
- Soil health, soil improvement and natural resource conservation;
- Quality;
- Virus and aphid control;
- Water use and quality;
- Fertilization;
- Management of soil borne diseases: brown scab, nematode, powdery scab and soft rot;
- Managing insect pests;
- Quarantine pest awareness; and
- Knowledge transfer.

The Marketing Core Business of ASA has two pillars. The first pillar, Generic Product Promotion (GPP), involves projects

aimed at stimulating demand in the local market through classic product promotion mix elements of media advertising, public relations and digital marketing. The second pillar, Market Access and Development aims to expand the overall potato market through market development and market infiltration strategies. The goals that drive and measure all marketing campaigns are:

- Managing consumer attitudes and perceptions towards the product through better, factual and scientifically proven research;
- Stimulating local and foreign demand for South African potatoes;
- Positioning potatoes as a food secure product;
- The management and utilization of positive relationships and involvement with stakeholders; and
- Creating a conducive, productive and profitable business environment for producers.

PSA supports the need to make commercial agriculture in South Africa more inclusive, representative and beneficial for all participants, and to improve household food security. To this end, it is implementing a number of transformation/development initiatives, begun in 2010, two of which aim:

- to broaden and accelerate the transformation of smallholder potato producers, mostly on formerly white-owned land, into fully commercial small/medium scale producers – the Enterprise Development Programme
- to improve ‘food garden’ potato production on land in communal areas for self-consumption and sale – mainly through informal channels – thereby also assisting the emergence of potential commercial growers – the Small Grower Programme.

With an annual budget of about R5 million, the Enterprise Development Programme currently assists 20 producers in seven (7) provinces mainly through soil analysis, feasibility studies and business plans, mentoring and a diminishing grant spread over four (4) years on potato seed. Linkages with other industry role-players are being developed to gear up funding and support. Partnerships have now been forged with NTK (formerly Noord Transvaal Kooperasie), Nulandis, McCain, Harvest SA (Afgri’s smallholder development programme) and ABSA. The initiative being undertaken with NTK is partly funded by National Treasury’s Jobs Fund and is enabling smallholder potato producers to access inputs on credit from NTK branches, thereby addressing what is one of the biggest challenges facing all smallholders. The scale on which producers being assisted by PSA are operating is growing steadily and is accelerating as a result of the formation of such partnerships.

Communication between PSA and role-players in the potato industry is crucial to promote the interests of the industry. In the words of Dr Robert T Fraley, Executive Vision President and Chief Technology Officer of Monsanto, nothing else will matter if we cannot find ways to communicate more effectively and interact in agriculture. PSA thus utilizes nearly 22 communication platforms to share information with various role-players in the industry. For example, from a wide variety of communication features ranging from publications, media liaison and the website www.potatoes.co.za to name but a few, currency for the industry is generated through the Media Monitoring Project. According to statistics for the past financial year, there was free exposure to the potato industry in the media worth R120 740 002.36 (recipes and advertising campaigns excluded). The breakdown of the free value of media exposure is as follows:

- Printed media: 788 articles worth R37 930 677.73
- Broadcast Media: 96 interviews / broadcasts worth R5 189 539.63
- Online Media: 7204 posts worth R77 619 785.00

In the rest of this report reflects more fully on the Core Businesses.

Finance and Administration

Personnel Matters

In the past financial year, the following personnel movements took place:

- Mr Eugene Strydom was appointed to the position of Information Specialist in the Information Core Business on 1 August 2017 after the post became vacant with the resignation of Ms Louise Swart in the previous financial year.
- Mr Albert Boneschans left the service of PSA on 28 February 2018 and the position has not yet been filled.
- Ms Rohondwa Rathogwa was promoted to Regional Officer with effect from 1 March 2018, which then left the position of Administrative Officer in the Transformation Division vacant.
- Mr Rudolf Badenhorst resigned on 31 December 2016 from the post of Manager: Market Development. However, the post was changed to the position of a Marketing Specialist, which was filled on 1 January 2018 by Ms Xolisiwe Potelwa.

Financial matters

On 30 June 2018 PSA ended off the third year of the fourth statutory period. Every year an amount in the form of bridging capital is transferred to the next year. This is simply done to continuously maintain a positive cash flow as the Potato Industry Development Trust (PIDT) continuously have a high debtors' book. This is the result of the inevitable time lag for bag manufacturers to recover the levy from their debtors (producers). The past year was also marked by the pressure of the drought and other climatic conditions on the volumes and therefore on the statutory levy income of the PIDT.

This necessitated savings. Savings on actual net expenditures amounted to 6.5%. The savings are the result of proactive action by the Board and Management of PSA and consist of coincidental as well as deliberate savings on operational costs and projects.

Statutory income and expenditure

PSA Non-profit Company (NPC) as administrator collected R47 794 381 on behalf of the PIDT in statutory levies during the 2017/2018 financial year. This amounts to approximately 99.5% of all levies recovered that were invoiced by bag manufacturers. A further R227 092 was received in interest on investments.

The 2017/2018 budget of PSA (NPC) as approved by the PIDT amounted to R45 597 113 of which R42 648 509 was appropriated. The underspending of R2 948 604 (6.5%) was attributable to the continued savings interventions. There was reasonable savings on travel and accommodation costs, and especially on personnel costs in the light of the vacancies mentioned above which were not filled, as well as on other operational costs.

Capital in the PIDT transfer capital account started off with R7 454 305 as per Ministerial approval and amounted to R12 481 303 on 30 June 2018 and will be transferred to the 2018/2019 financial year. As set out in Figure 1, PSA (NPC) managed to meet the prescriptions given by the Minister of agriculture, Forestry and Fisheries.

According to a PSA Congress decision, equal funds had to be allocated to the two Core Businesses Research and Development and Market Development and Generic Product Promotion. The marginal deviations in respect of the above were due to decisions made during the previous financial year to ensure that PSA (NPC) complies with good corporate governance in respect of tender processes as well as to the postponement of funding to enterprise development farmers due to the drought. This gave rise to funds being transferred to the 2017/2018 financial year, but still utilised in the relevant Core Businesses. The decision was taken that a ratio of about 60%:40% between operational and project costs should be maintained. In this regard PSA (NPC) succeeded.

The expenses of approximately R42.6 million was utilized as follows (rounded off, refer to Figure 1):

Income from own reserves

PSA (Voluntary) own funds are mainly supplemented by the following (refer to Figure 2):

- Return on investments and loans: R902 631
- Rent received on capital items: R433 780

Expenses related to the normal income as mentioned above are depreciation of assets R195 436, auditing and legal costs R43 125, administrative costs R213 468, corporate and other project costs R172 378 (refer to Figure 3).

Additional funds received include R1 835 560 for the hosting of the biannual Potato Congress, R1 013 457 which was generated by the hosting of the Potato Research Symposium, R321 209 for the Transformation Symposium and R497 611 by sponsorships of Regional Meetings. The Symposiums and Regional Meetings were funded in total by additional income received from sponsors during the year under review.

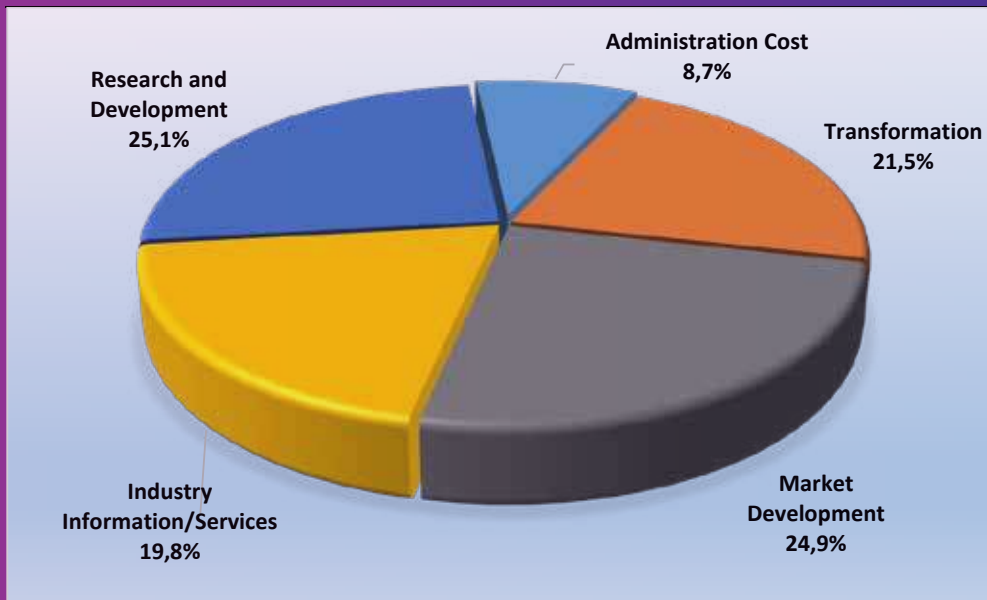


Figure 1: PIDT appropriation of funds

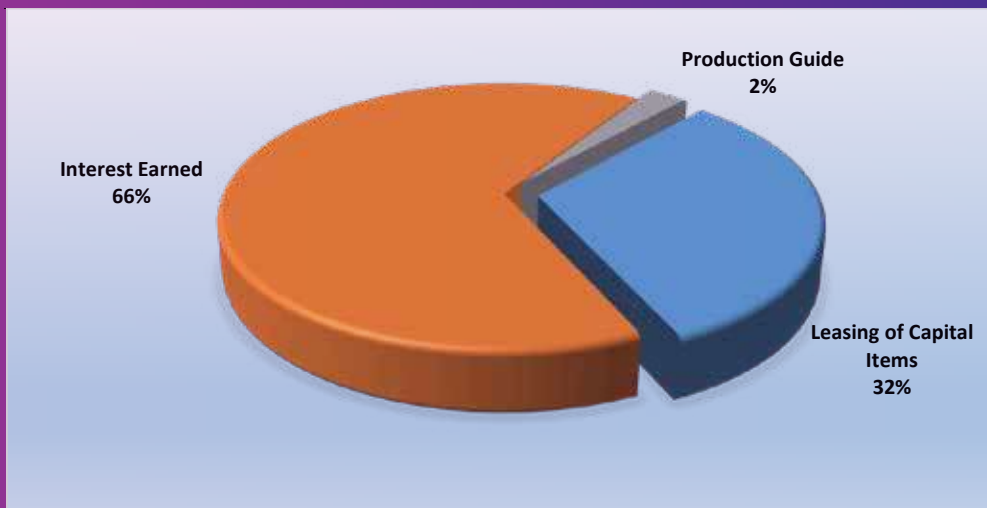


Figure 2: Income PSA (Voluntary)

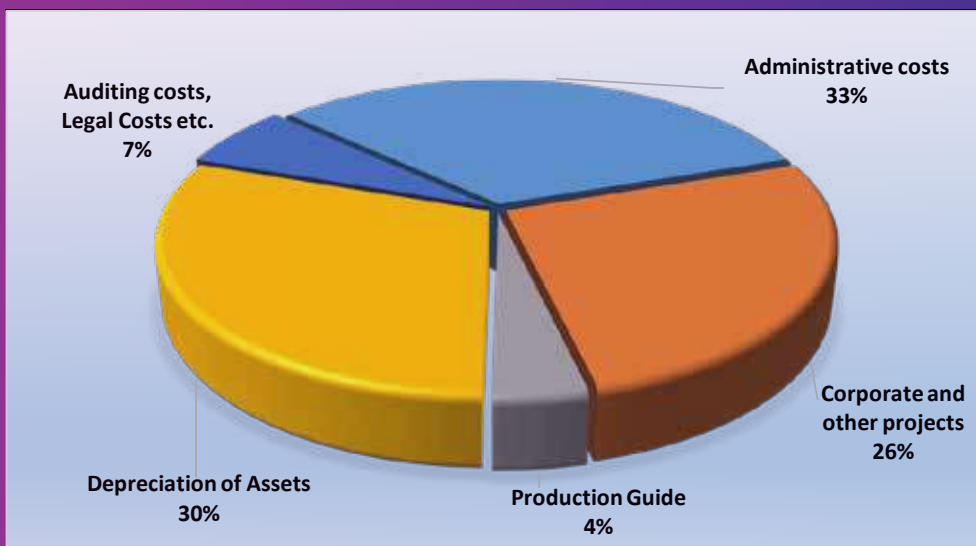


Figure 3: Expenditure PSA (Voluntary)

Total funds and reserves amounted to R13 710 715. Property and movable assets, based on book value amounted to R533 255 and investments and loans to R12 501 423.

Financial Position

I am proud to say that the financial position of PSA is still healthy to the core. The pressure due to the decrease in revenue is fully absorbed by curtailing the expenditure side.

Tally and control measures are continuously reviewed and tightened to restrain operational costs and thereby ensuring a healthy balance between operational costs and the appropriation in respect of projects. The PIDT accepted the audit reports by KPMG.

KPMG as well as Fourie & Botha issued an unqualified report in respect of PSA (NPC) and PSA (Voluntary), respectively. No audit misstatements were identified during the audit. PSA has been retained by the PIDT as administrator to manage the statutory measures which includes the collection and management of the statutory levies. As part of its managerial responsibilities, PSA (NPC) is also responsible for the implementation and management of the Core Business projects accepted by PSA's Board of Directors and approved by the PIDT.

Communication

The core of PSA is based on primary service to all potato producers, as set out in the mission statement, as well as ongoing service to all other role-players in the industry. The organization aims to protect and promote the interests of potato producers in particular, and the potato industry as a whole.

Effective two-way communication with role-players is therefore extremely important for PSA. It is therefore constantly endeavoured to expand this communication to the benefit of the potato producers and other role-players in the potato value chain.

PSA's corporate website www.potatoes.co.za is in the process of migrating to an advanced technological platform that will also make it user friendly for access by smartphones. Such functionality will benefit visitors, especially when displaying information in tables or graphs. The upgrade will be launched during the 2018/2019 financial year.

CHIPS magazine boasted its 35th volume at the end of June 2018. The bi-monthly publication is the only official magazine in the South African potato industry and serves as a platform for important communication on industry information, research, market development, generic product promotion and transformation. In addition to a variety of other information, the magazine also provides a look at local and international news applicable to the potato industry. The production and distribution cost of CHIPS comes 100% from advertising.

Other channels of communication are also used to provide real-time information to role-players. This includes the monthly newsletter containing market commentary, ad hoc news flashes, text messages and direct e-mails. The value of the communication conveyed by the above mentioned channels is evident from the day-to-day requests of stakeholders to be placed on the distribution lists.

Secretariat

PSA ensures representation throughout the potato value chain by way of sitting on industry oriented forums and committees. This structure provides a platform for debate, discussion and decision-making where all role-players have a turn to speak. The forums and committees that took place during the year under review are set out in Table 1. PSA provides the necessary administrative and secretarial services to all forums and committees. The number of meetings held during the 2017/2018 financial year (see Table 1).

In closing

The potato industry in South Africa must look globally and act locally. It is critically important that we explore new markets, understand what is needed

Tabel 1: Meetings

MEETINGS	NUMBER
Boards	
PSA	2
Potato House	2
PSA Committees	
Management Committee	2
Marketing Committee	3
Information Committee	3
Research Committee	3
Transformation Committee	3
District Developing Farmers Committees	4
Audit Committee	3
Human Resources Committee	3
PIDT and Committees	
Trust	3
Risk and Audit Committee	3
Bursary Committee	2
National Seed Potato Growers' Committee	2
Seed Potato Growers' Meetings	4
Forums	
Potato Industry Forum	1
Seed Potato Growers' Forum	1
PSA Symposiums	
Transformation Symposium	1
Research Symposium	1
Marketing Symposium	1
Other	
Potato Industry Forum Steering Committee	1



to compete in these markets and adjust accordingly. Increasing the demand for potatoes, not just on the domestic market, should be considered critical. New cultivars should be included at the start of the supply chain as well as new product development in order to adapt to changing consumer habits, tastes and preferences. I have no doubt that industry leaders will find solutions to these challenges, as they have already proven their flexibility in their approach to a rapidly changing environment.

In this, PSA is fully committed to liaising with all the other role players in the potato industry so that together, solutions can be found to ensure a sustainable future.

André Jooste (PhD)
Chief Executive Officer

CHIEF FINANCIAL OFFICER



Hein Oberholzer

CHIEF FINANCIAL OFFICER

BUSINESS REPORT

Structure

PSA is a non-profit company, incorporated in terms of the Companies Act, 2008 (Act No. 71 of 2008), established to serve, protect and promote the interests of the South African potato industry. This structure ensures that the organisation executes its mandate to render a comprehensive service to the potato industry as a whole.

Financing

PSA (NPO) is funded by a statutory levy on potatoes, held in the PIDT. As the appointed administrator, PSA collects the levy on behalf of the PIDT and applies to the PIDT for funds to finance its activities and administration. In accordance with the ministerial guidelines, the funds are appropriated as follows:

- Approximately 70% for the delivery of the core business functions (excluding transformation).
- Not less than 20% for the delivery of the transformation function.
- Not more than 10% for the delivery of the administrative function.

PSA (NPO) also has non-statutory funds available that are supplemented by sponsorships and combined project funding. These funds are used to fund projects and functions in the interest of potato producers in particular and the potato industry in general. Approval for the appropriation of such funds lies with the board of directors of PSA.

Board of Directors

The PSA board of directors is representative of the potato producers in the 16 potato production regions, the seed potato growers and Black enterprise development potato producers. The Board of Directors has been constituted as shown in Table 2.

Table 2: National Council / Board of Directors

NAME	POSITION	REPRESENTING
J F (JF) van der Merwe	Chairperson	Independent / Non-Aligned
J R (Rudi) Heinlein	Vice-Chairperson	Northern Region (Limpopo, Mpumalanga, Gauteng, Loskop Valley)
W A (Wouter) van Amstel	Director	Northern Region (Limpopo, Mpumalanga, Gauteng, Loskop Valley)
J C (Johan) Holtshausen	Director	Northern Region (Limpopo, Mpumalanga, Gauteng, Loskop Valley)
B S (Bernhardt) du Toit	Director	Southern Region (Sandveld, Eastern Cape, Ceres, Southern Cape, South Western Cape)
J P (Jan) van Zyl	Director	Southern Region (Sandveld, Eastern Cape, Ceres, Southern Cape, South Western Cape)
N J (Nicolaas) Lourens	Director	Eastern Region (KwaZulu-Natal, Eastern Free State and North Eastern Cape)
M J (Mike) Green	Director	Eastern Region (KwaZulu-Natal, North Eastern Cape and Eastern Free State)
A S (André) Coetzee	Director	Western Region (North Western Cape, Northern Cape, South Western Free State, Western Free State)
J I (Izak) Cronjé	Director	Western Region (North Western Cape, Northern Cape, South Western Free State, Western Free State)
P G J (Gerhard) Posthumus	Director	Chairperson: National Seed Committee
J (Joseph) Bantom	Director	Southern District (Western Cape, Sandveld, Ceres, Southern Cape, South Western Cape)
T S (Siseko) Vikilahle	Director	South Eastern District (North Western Cape, Eastern Cape)
N R (Rodney) Mbuyazi	Director	Eastern District (KwaZulu-Natal)
S G (Gift) Mafuleka	Director	Central District (Limpopo, Free State, Gauteng, Mpumalanga)

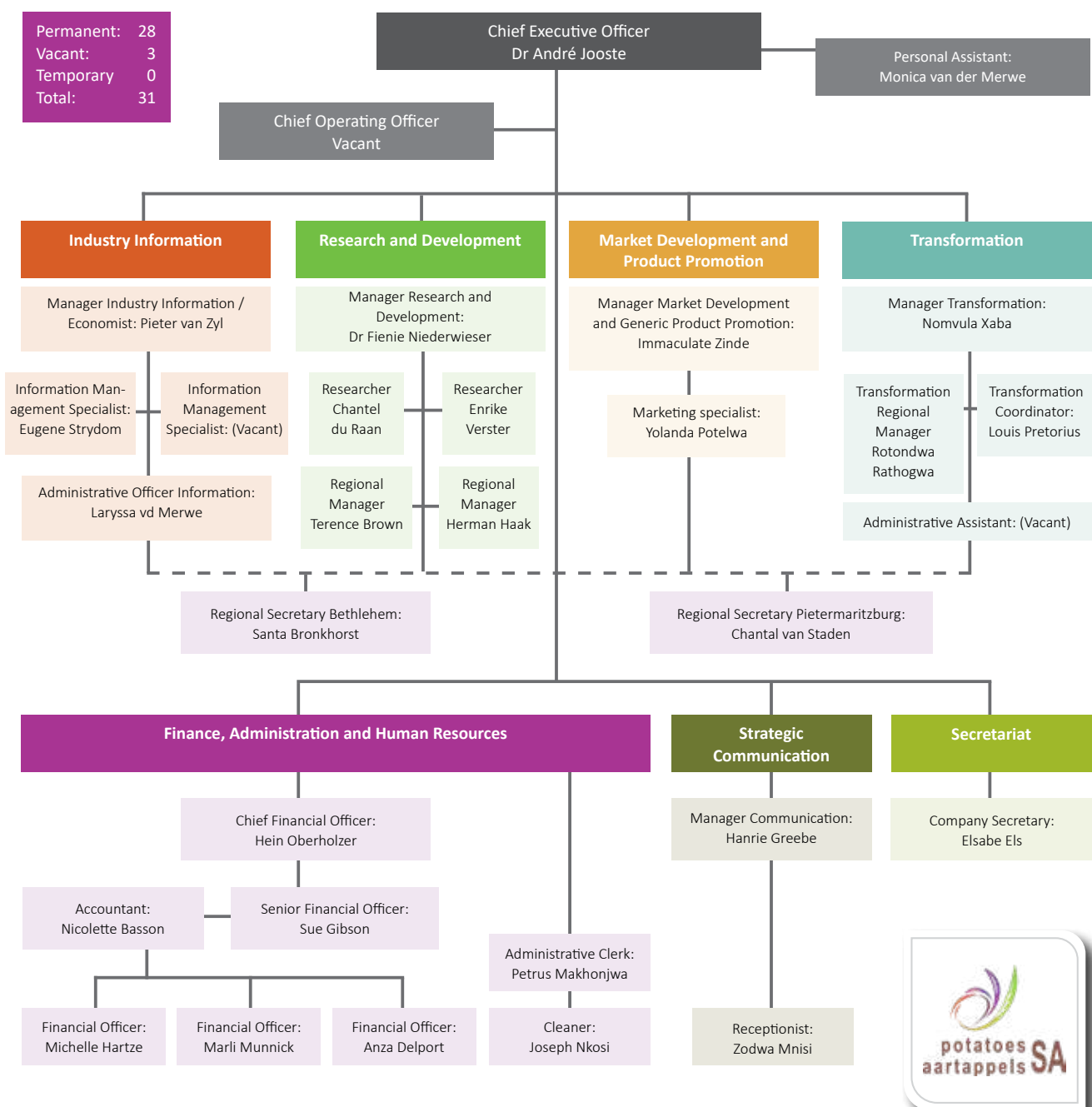
In terms of the Memorandum of Incorporation of the company, the Chairperson of the Audit Committee will be a non-executive and unattached qualified person. During the year under review, Mr J H du Plessis of the chartered auditing firm, Geyser and Du Plessis, again served as Chairperson of this committee.

Administration

Apart from three vacancies, on 30 June 2018 PSA had 28 full-time employed staff members of which 9 served at the six regional offices to ensure optimal service delivery to the industry. The services rendered are discussed at length in the Core Business reports.

The staff is led by an executive management, which consists of the Chief Executive Officer, Company Secretary and the Managers of the four Core Businesses and support services divisions as indicated in Diagram 1.

Diagram 1: Personnel structure







INDUSTRY INFORMATION



Pieter van Zyl

Manager: Industry Information

BUSINESS REPORT

The potato industry operates in a free market environment which makes the availability of information a necessity in achieving success. To answer to the information needs of the industry, PSA delivers a comprehensive professional information service that is reliable, relevant and timely. The service allows role-players to make strategic business decisions on a daily basis, especially during the production and marketing seasons of potatoes.

PSA's industry information system comprises the gathering, interpretation and release of industry related information with the primary objective of enabling informed decision-making for all role-players, as well as ensuring greater transparency in the potato industry.

Key focus areas

The key focus areas of the Industry Information Core Business are categorised as follows:

Table 3: Projects in the Industry Information Core Business

FOCUS AREAS	COMPONENTS
Production and market information	<ul style="list-style-type: none"> • Market and marketing reports: Daily, weekly, monthly, seasonally and yearly. • Regular crop reports from 16 production regions. • Monthly market commentary. • Fresh produce markets: Trend analyses.
Production costs	<ul style="list-style-type: none"> • Updating production costs: Largest regions. • Analysis of packaging and marketing costs. • Updating of price/yield model (fresh versus processed potatoes). • Trend analyses. • Transport cost models. • Transport costs and related matters.

FOCUS AREAS	COMPONENTS
Agri Benchmark	<ul style="list-style-type: none"> Updating of a “typical” potato farm in the four largest regions. Comparison of “typical” potato farms: SA versus foreign countries. Test “what if” scenarios on “typical” farms (farm-level modelling).
Potato value chain analysis	<ul style="list-style-type: none"> Determine the following indicators, among others: Size of industry, per capita consumption, main varieties and consumer expenditure.
Potato Industry Model	<ul style="list-style-type: none"> Produce a potato production forecast for the coming years, by making use of a specific set of assumptions. Conduct scenario analyses or use different sets of assumptions to generate a better understanding of the potato industry.
Efficiency in the potato production process	<p>Packhouse and marketing efficiency. Important indicators are calculated, compared and studied, and norms are established:</p> <ul style="list-style-type: none"> Packhouse efficiency (e.g. number of 10 kg bags packed per worker per day). Investment in machinery and implements. Market price analysis. Quality index for producers delivering to the market. Tuber damage & weight loss: extent and causes.
	<p>Optimisation of energy and water consumption for potato production. The study was done by conducting various case studies in the Western Free State. The following is of importance:</p> <ul style="list-style-type: none"> Test the effect of different scenarios on energy costs. In the process, energy consumption efficiency was also tested and studied. Water consumption efficiency among co-workers was calculated and compared. Efficiency of irrigation systems among co-workers was determined and compared.
Database building and maintenance	<p>Potatoes South Africa gathers all types of information on a daily, weekly, monthly, seasonal and yearly basis. It is essential that all information is gathered, processed and distributed in an orderly manner. Relevant information is added to the database. ASA is at an advanced stage of automating the current database through the establishment of a self-help information portal (website & mobile application).</p>
<i>Ad hoc / other</i>	<p>Reports to the National Energy Regulator of South Africa (NERSA), Department of Labour and South African Revenue Service.</p>

The following activities, among others, received attention:

- A recent CHIPS article describes what may happen in the potato industry over the next 10 years. Projections generated by the Bureau of Food and Agriculture Policy’s (BFAP) Potato Industry Model indicate that hectares planted will not increase significantly over the next 10 years. Hectares planted should move sideways, but the crop size should rise by half a million tons, which implies that the average yield will rise.

 - The aforementioned operating model is also used to test scenarios on “typical” potato farms (farm-level modelling). Submissions were made to, inter alia, the Departments of Labour and NERSA, indicating the effect of ongoing cost increases on the sustainability of potato production.
- Production costs were updated for nine regions. In some irrigation regions, depending on the yield achieved, total cost exceed R200 000 per hectare. Analyses also show that the total production cost of potato production increases faster than inflation. A transport cost model was also developed, which can be used as a benchmark for producers using their own transport to markets. Transport costs are the second or third largest single cost component for a potato producer. Excel spreadsheet models were developed for both the production costs and transport costs of potato production. Producers can capture their own information and compare their costs with the benchmark figures.

- The packhouse and marketing effectiveness study was undertaken in six regions. It consists of the following components, among others:
 - o Packhouse norms are developed
 - Among other things, labour efficiency and mechanisation level were considered. An important indicator used is the average number of 10kg bags handled by one person per day in the packhouse. Depending on the region, it varies between 100 bags per worker and 200 bags per worker. Only labour costs in the warehouse range between R5 000 and R10 000 per hectare, which emphasises that labour needs to be used effectively. Mechanisation can replace labour, but the cost thereof can be high. The question is how efficiently labour and capital (mechanisation) are utilised in the packhouse.
 - o Weight loss measurement & Tuber damage
 - Last year in another project, many regions noted that a lot of tuber damage, especially mechanical damage, is observed a few days after packaging. To identify the causes of tuber damage, a methodology has been developed in collaboration with the Agricultural Research Council to evaluate the contribution of various actions (removal, transport, unloading, washing, and so forth) to tuber damage.
 - Tuber damage refers to tubers with 1 or more of the following signs, namely mechanical damage, rot, wilting and skinning. In order to investigate the cause of tuber damage, samples are drawn at 4 places in the collection and packaging process. The respective samples (3 x 10kg bags each) are drawn (1) in the field before the removal action, (2) at the feed bin before the tubers enter the packhouse, (3) directly after the washbasin and (4) at the end of the packing line. Tubers drawn at the hopper evaluate the removal and transport action. Tubers drawn directly to the washbasin evaluate the washing action and tubers drawn at the end of the sorting/ packing line evaluate the sorting and packing action. The tubers drawn before the remover are of course not handled and should not theoretically show tuber damage.
 - There are large variations in tuber damage among co-workers in regions. In all regions, the washing action is the main cause of tuber damage, which means that the main causes of tuber damage do not differ between co-workers. The sorting and packing action in all regions yields the least tuber damage.
 - o Market price analysis
 - Co-workers' market prices for Class 1 Large Medium were acquired and analysed from the Johannesburg market. Market prices were also compared with packhouse indicators, for instance, labour efficiency and the level of mechanisation. Of course, there is a large variation between co-workers' average market prices.
 - o Quality index for individual producers delivering to markets (in progress).
 - The index provides producers with a benchmark according to which they can measure or compare themselves to other producers in the region. Four criteria have been developed that are used to allocate a total index of 10 to each producer. The better the point, the better the producer performs. Producers can also clearly see their "weak points" and "strong points" in respect of their product on the market floor. At each producer, during packhouse visits, 4 bags of Large Medium are opened and evaluated. For each criterion, a 1, 2 or a 3 is awarded. The four criteria are as follows.
 - Weight difference between the heaviest and lightest bag weighed. If the weight difference per bag is less than 200 grams, a 3 is awarded.
 - Uniformity in tuber size. If all tubers are more or less equal, a 3 is awarded.
 - Mechanical damage. If fewer than 5 tubers occur per bag with mechanical damage, a 3 is awarded.
 - Colour of tubers. If an unusual colour is observed, a 1 is awarded.
 - Also, the individual tubers are weighed by bag to see what percentage of bags' weight is not Large Medium tubers.
- A project titled "Optimisation of energy and water consumption for potato production" was concluded in the Western Free State. The results show that electricity costs per hectare of potatoes vary greatly among farmers. Producers' average electricity costs per hectare of irrigation easily range between R7 000 and R11 000 in a region. Of course, there are many reasons why farms' costs per hectare vary so much. Case studies were done at particular producers during which the efficiency of their pivots was measured (various criteria were used for this purpose).

Reasons for poor performance were then also pointed out. Analysis has shown that the pumping and irrigation of water can easily account for 70% of the total annual electricity bill. The water consumption efficiency of co-workers (kg potatoes marketed per mm water irrigated) was also calculated and compared. Scenario analyses were done accordingly on the basis of spreadsheet-type software to determine whether co-workers' electricity costs per hectare can be reduced. Energy consumption efficiency among co-workers was also calculated and analysed. Various role-players, including Eskom, were involved.

Information Committee

The composition of the Information Committee is as follows:

Table 4: Die composition of the Information Committee

NAME	REPRESENTATION
Mr Jan van Zyl (Chairperson)	Board of Directors (Sandveld)
Mr Wouter van Amstel (Vice-Chairperson)	Limpopo
Mr Louw Smit	Sandveld
Mr Charl Nel	Western Free State
Mr Wessel Durandt	Eastern Free State
Mr MC Venter	Co-opted (Limpopo)
Mr Johan Holtzhausen	Co-opted (Mpumalanga)
Mr Roland Buys	Co-opted (KZN)

Market trends

During the 2017 crop year, 52 017 hectares of potatoes were planted, which is 705 hectares fewer than the previous year's plantings. Good production conditions led to a harvest of 245 million 10kg bags, which is almost 30 million 10kg bags more than in 2016 (see Figure 4).

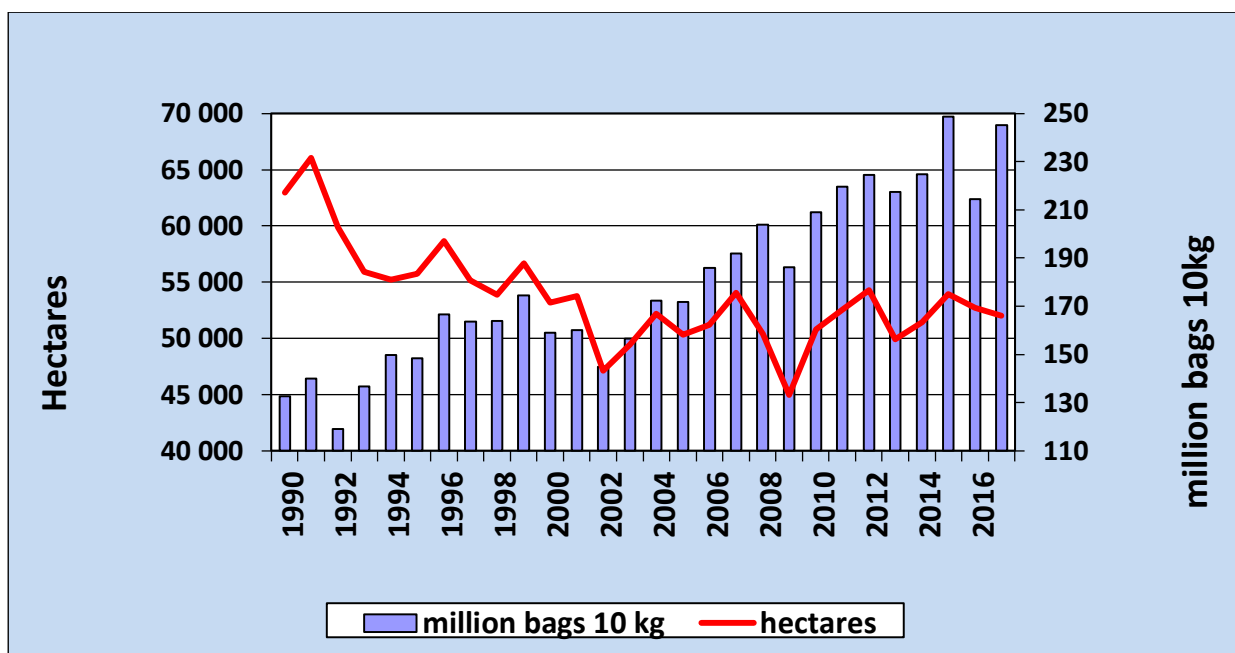


Figure 4: Hectares planted versus crop size

With regard to the 2017 crop year, the Limpopo production region planted the most hectares, 11 129 hectares, representing 21% of the total hectares planted (see Table 5). The Limpopo production region also yielded the largest crop, almost 56 million 10kg bags, representing 23% of the national crop. The four largest production regions planted 69% of the total hectares, yielding 65% of the national potato crop.

Table 5 also shows the average yield of the different regions. Dryland cultivation took place mainly in the Eastern Free State and to a lesser extent in the Western Free State, which had an inevitable effect on the average yield of these regions.

Table 5: Potato production in 16 regions - 2017 crop year

	Region	Hectares	% of hectares	Total harvest in 10kg bags	% of harvest	Average yield in ton/ha
1	Limpopo	11 129	21%	56 682 200	23%	50,9
2	Eastern Free State*	10 670	21%	36 514 150	15%	34,2
3	Western Free State	7 259	14%	35 929 500	15%	49,5
4	Sandveld	6 611	13%	30 971 100	13%	46,8
5	North West	2 344	5%	14 291 900	6%	61,0
6	Northern Cape	2 232	4%	13 271 300	5%	59,5
7	KwaZulu-Natal	2 997	6%	12 768 800	5%	42,6
8	Mpumalanga	1 546	3%	7 990 200	3%	51,7
9	South Western Free State	1 259	2%	7 895 200	3%	62,7
10	North Eastern Cape	1 708	3%	7 701 900	3%	45,1
11	Gauteng	1 098	2%	6 301 494	3%	57,4
12	Ceres	1 076	2%	5 956 375	2%	55,4
13	Marble Hall	1 097	2%	5 811 700	2%	53,0
14	Eastern Cape	696	1%	2 451 000	1%	35,2
15	Southern Cape	209	0,4%	804 650	0,3%	38,5
16	South Western Cape	86	0,2%	316 200	0,1%	36,8
		52 017		245 657 669		47,2

* Dry land cultivation occurs

The number of commercial potato producers (farming units), dropped to 541 in the 2017 crop year. In 2010 there were 690 producers. In comparison, 11% of all producers each planted more than 200 hectares of potatoes (Figure 5). It is also clear that 48% of producers each planted fewer than 51 hectares of potatoes (Figure 5).

According to Figure 6, it is clear that the formal market is the largest outlet for South African potatoes. Approximately one-third of the national crop is marketed through the formal marketing channel.

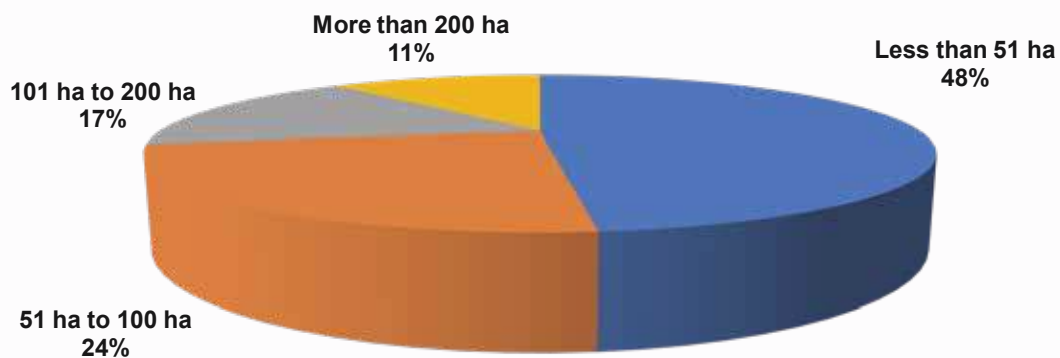


Figure 5: Percentage of producers versus size of planting in hectares (2017)

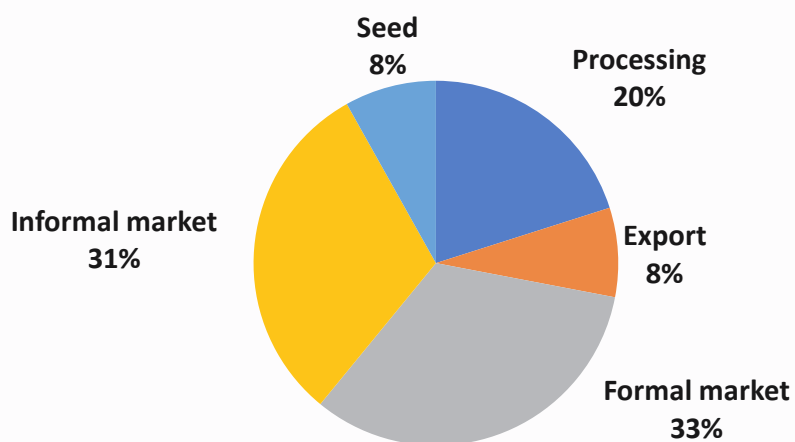


Figure 6: Distribution of total potato 2017 crop



RESEARCH AND DEVELOPMENT



Fienie Niederwieser

Manager: Research And Development

Research focuses throughout on finding solutions for producers' needs and thereby ensure the dissemination of information through, for example, the factsheets on pests and diseases. For the 2017/2018 financial year, 23 formal projects were approved by the PIDT. Table 6 shows the different projects funded during 2017/18.

Table 6: Formal projects approved for funding (2017/2018)

ORGANISATION	PROJECT
Agricultural Research Council	<ul style="list-style-type: none"> • <i>In vitro</i> maintenance of open and one (1) sub-licence cultivar (research service) • Development of a diagnostic test, and evaluation of cultivars' tolerance to fissure scab (final year) • Survival of <i>Ralstonia Solanacearum</i> (bacterial wilt) and sanitation of implements • Integrated management of root-knot nematode (final year) • Evaluation of popular cultivars for resistance to common scab (final year) • Verticillium in the Sandveld • Effect of rotation crops on nematode populations in a crop rotation programme in the Eastern Free State
University of Pretoria	<ul style="list-style-type: none"> • Aphids monitoring (research service) • Relationship of PVY- and PLRV-infected Aphids (final year) • Development of fertilisation guidelines for two new cultivars (final year) • Determination of the water footprint and usability of new technology (final year) • Effect of rotation crops on soil quality, soil microbe populations and soil-borne pathogens in the Eastern Free State • Evaluation of popular cultivars in respect of tolerance to root-knot nematode • Evaluation of popular cultivars in respect of soft rot pathogens (final year) • Evaluation of popular cultivars in respect of powdery scab (final year) • Identification of alternative hosts for powdery scab (final year)

ORGANISATION	PROJECT
Stellenbosch University	<ul style="list-style-type: none"> • Most important factors influencing internal quality under local conditions
Department of Agriculture: Western Cape	<ul style="list-style-type: none"> • Investigation into the influence of climate on the activity and intensity of virus vectors in the winter rainfall region • Conservation agriculture practices for the Sandveld (Phase 2)
Geohydrological and Spatial Solutions (GEOSS)	<ul style="list-style-type: none"> • Study on the water balance and monitoring of groundwater in the Sandveld (new)
University of the Free State	<ul style="list-style-type: none"> • Management of volunteer potatoes (final year)
PSA	<ul style="list-style-type: none"> • Review of factsheets and composition of final reports, short courses and other technology transfer actions • Cultivar evaluation and other work group trials

During the 2017/2018 financial year, there was involvement in 13 cultivar evaluation projects in various potato production regions as indicated in Table 7.

Table 7: Cultivar evaluation projects of work groups

REGION	LOCALITY	TYPE	CULTIVATION PRACTICE
Ceres	Donkerbos	Not executed due to drought	
KwaZulu-Natal	Cedara	Cultivar evaluation	Irrigation
	Kamberg	Plant population	Dryland
			Irrigation
Limpopo	Pietersburg	Cultivar evaluation	Irrigation
Limpopo	Tom Burke	Cultivar evaluation	Irrigation
Mpumalanga	Middelburg	Cultivar evaluation	Irrigation
Northern Cape	Douglas	Cultivar evaluation	Irrigation
North-Eastern Cape	Ugie	Cultivar evaluation	Irrigation
Eastern Cape	Hankie	Not executed due to drought	
Eastern Free State	Warden	Cultivar evaluation	Dryland
		Demonstration: Plant protection methods	Dryland
		Demonstration: fertiliser products	Dryland
	Oranjeville	Cultivar evaluation	Irrigation
Sandveld	Aurora	Cultivar evaluation	Irrigation
South-western Free State	Petrusburg	Cultivar evaluation	Irrigation
Western Free State	Bultfontein	Cultivar evaluation	Irrigation
Western Free State	Kroonstad	Drowning	

Research Committee

Table 8: Composition of the Research Committee

NAME	REPRESENTING
André Coetzee (Chairperson)	Northern Cape, South Western Free State & Western Free State
Gerhard Posthumus	Potato Seed Grower
Johan Holtzhausen	Loskop Valley & Mpumalanga
Gavin Hill	KwaZulu-Natal & North Eastern Cape
Ross Berg	Sandveld
Leon Rix	Ceres, Southern Cape & South Western Cape
George Gadda	Limpopo
Gert Bester	Eastern Free State
Ineke Vorster (co-opted)	Processing Industry (fries)
Frank Osler	Processing Industry (crisps)
Marieta Botha (co-opted)	Potato Laboratory Service

Highlights

Potato Research Symposium 2017

The Potato Research Symposium (2017) took place on 25 and 26 July at Club Mykonos, near Langebaan. Scientists gave feedback on the current state of potato research projects funded by the PIDT and other institutions (25 presentations were made).

Potato work groups were given the opportunity to report on the results of the 13 trials conducted during the previous year.

Eleven presentations were given by postgraduate students, of which eight (8) were PIDT bursary holders.

Dr Denise Altenbach (Bioreba) gave an overview of the value of the Elisa test, and Mr Chris Barnard spoke about irrigation under drought conditions from the producer point of view.

The symposium was attended by 220 people and included: potato producers, representatives of input providers, representatives of research- and potato-related institutions, and postgraduate students.

Awards were made for the best presentations. Prof. Martin Steyn (University of Pretoria) received the award for Best Presentation by a Researcher for his presentation: “Watervoetspoorassesering van aartappelproduksie in Suid-Afrika” (Water footprint assessment of potato production in South Africa) and Mr Pieter Brink (Chairperson: Sandveld Work Group) won the prize for his presentation on the cultivar evaluation trail at Aurora.

Mr Joel Dube (University of Pretoria) won the prize for Best Student Presentation for his presentation “Effect of rotation crops on soil Fusarium and soil bacteria populations in an Eastern Free State crop rotation programme”.



The trophy for Best Attendance was won by Ceres (thanks to Du Toit Groente for excellent support).

Information days in which Research was involved

The **Sandveld Work Group's** information day (15 March 2018) was attended by more than 70 people. Progress with projects related to the Sandveld was reported by researchers. Fruitlook also introduced their satellite image service. A decision was made to test the product's service in respect of irrigation scheduling recommendations in one of Prof. Martin Steyn's projects.

The Sandveld Work Group also organised a workshop, which was well attended, to address powdery scab in the region. The outcomes of the workshop were, among other things, that the Board of Directors was requested to invite an expert on the disease to approve the occurrence and management of powdery scab in New Zealand and Australia and to secure funding through the PIDT.

During the **Eastern Free State Work Group's** Information Day on 8 March 2018, the work group trials could unfortunately not be visited due to heavy rain the previous day. An information booklet compiled with information on the expected effect of climate change on potato production in the Eastern Free State, as well as the performance of cultivars already being evaluated in work group trials.

Both commercial and small-scale farmers visited the **KwaZulu-Natal Work Group's** trial visit (January 2018) at Cedara. The site offers an excellent opportunity to evaluate cultivars' tolerance to late blight. Observations by a drone clearly illustrated the value of the technology in evaluating the condition of plants of different cultivars.

Following the harvesting of the trial, the **South-western Free State Work Group** organised a demonstration of the cultivars that had been in the cultivar evaluation trial.

Technology transfer

CHIPS articles

During the year under review, 12 technical articles and 11 reports on the work groups were published in CHIPS, all of which are available on the

Final reports

Two reports were completed:

1. "Nitrogen management effects on selected potato
2. "Impact of different climate change scenarios on future potato production in South Africa: study II."

Bundle of CHIPS articles

1. Irrigation scheduling



MARKET DEVELOPMENT AND GENERIC PRODUCT PROMOTION



Immaculate Zinde

Manager: Market Development and Generic Product
Promotion

The increase in per capita consumption of potatoes in South Africa over the past ten years affirms that the investment in market access and development as well as generic product promotion is bearing fruit.

The purpose and existence of PSA's Marketing Core Business is to aid potato growers to promote and sell potatoes both locally and outside the Republic of South Africa. For this reason, the Marketing Core Business performs two fundamental strategic functions: Generic Product Promotion (GPP) as well as Market Access and Development (MAD).

The 2017/2018 financial year has consistently shown that the marketing of potatoes in South Africa is of great importance. Although the demand for potatoes and their consumption is growing, there is still a lot of work to be done to put it forward as a strong contender of fresh vegetables, locally and beyond the borders of the Republic of South Africa.

The South African population is expected to reach approximately 60 million people by 2020. This, together with water and land restrictions such as reports and food safety and security, is increasingly emerging in South Africa, the continent in general and the world. For the industry to stay relevant, it needs to grow steadily and live its mission: *United to bring excellence in the potato industry*, powerful and innovative solutions must be found.

In the year under review, all GPP projects were carried out under the slogan: *Classic goodness of the earth – always fresh, always in season!*

Marketing Committee

Table 9: Composition of the Marketing Committee

NAME	REPRESENTING
Rudi Heinlein (Chairperson)	Northern Region (Limpopo)
Joost Engelbrecht	Southern Region (Sandveld, Eastern Cape, Ceres, Southern Cape and South Western Cape)

NAME	REPRESENTING
Nikolaas Lourens	Eastern Region (KwaZulu-Natal, Eastern Free State, North Eastern Cape)
Johan Holtzhausen	Northern Region (Mpumalanga, Gauteng, Loskop Valley)
Werner du Plessis	Western Region (North Western Cape, Northern Cape, Western Free State, South Western Free State)
Gerhard Posthumus	Chairperson: national Seed Potato Committee
Deon van Zyl	Institute of Market Agents South Africa (IMASA) Potato Industry Development Trust (PIDT)
Tutti Rudman	South African National Consumer Union (SANCU)
Matilda van der Walt	National Agricultural Marketing Council (NAMC)
Elvis Nakana	Department of Agriculture, Forestry and Fisheries (DAFF)
Mothlanke Tladi	SA Informal Traders Association (SAITA)
André Young	SA Union of Food Markets (SAUFM)
Francina Makhoane	Consumer Goods Council of South Africa (CGCSA)
Rudolf Badenhorst	Processing Forum
Dr André Jooste	Chief Executive Officer
Immaculate Zinde	Manager Marketing and Generic Product Promotion
Elsabé Els	Secretary

Heart Mark endorsement

The year under review kicked off with a huge bang! After many years of persuasion, the organisation's Marketing Core Business was granted permission by the Heart & Stroke Foundation of South Africa (HSFSA) to use the heart mark across all generic product promotion campaigns. The product is now being marketed as heart healthy, when:

1. Baked, boiled and/or steamed with skin on;
2. Prepared as the starchy part of a meal on a plate.

*Pssst...*The heart mark may not be used on product packaging.

Above the Line Advertising

With potatoes having found a "new lease on life" (heart mark usage), it was clear that all above the line advertising campaigns had to depict the product as a hero carb with valuable micro- and macro-nutrients necessary for optimum health:

- 8.2. million South African readers were reached through print advertising in the 2017/18 financial year;
- Over 12 million consumers in the primary targeted market were exposed to the product's value proposition in the year under review through radio;
- The television campaign delivered 28 rating at a reach of 9% and a frequency of 3.

"The truth isn't the truth until people believe you, and they can't believe you if they don't know what you're saying, and they can't know what you're saying if they don't listen to you, and they won't listen to you if you're not interesting, and you won't be interesting unless you say things imaginatively, originally, freshly." Bill Bernbach

Through it all, creativity – originality – fact/truth were the order of all above-the-line advertising projects.

Content generation and correct content contextualisation

It is said that one cannot begin to give social, moral and intellectual instruction, until...until, the audience has gained confidence in the messenger and the communicated message. The year under review was used to form real, strong and unbreakable connections with targeted consumer segments in order to ensure that the communicated message is received, internalised and acted on. All nutritional pieces, recipes, thought leadership pieces and development of content were executed under the tutelage of professionals and experts in the various fields to breed credibility and content that is backed by truth and fact. This information formed the base of all creative efforts across all GPP projects. To view the content, visit: www.potatonation.co.za.

Registered dieticians, chefs, photographers, content curators were assembled in the year under review for purposes of delivering on the Core Business's strategic mission to: *Inform-Inspire-Educate!*

Public relations

R375 000 was budgeted in the 2017/2018 financial to drive PR and media relations aimed at getting the product free exposure across different mediums. The Marketing Core Business planned and executed three campaigns as follows:

2017 World Food Day

The objective of the 2017 World Food Day campaign was to galvanise South Africans behind potatoes by imploring them to identify a less needy person and cook them a potato based meal. The campaign received great free media exposure worth R2.3 million.

2018 Media Announcement of the Heart & Stroke Foundation South Africa Endorsement

Between September 2017 and January 2018, the Core Business compiled and collated sound information through close working with registered dieticians and chefs. This as a deliberate move to make a public announcement of the HSFA endorsement. This activation generated +/- R609 000 worth of free media exposure.

2018 World Hunger Day

World Hunger Day is commemorated every year on 28 May 2018. The Marketing Core Business developed a two pronged approach for this year's activation:

1. Target and lobby media for **free exposure**. This, as a continuation of activations carried out during World Food Day in October 2017;
2. **Walk the talk**, by showing the communities in which PSA operates, that PSA cares.

To achieve the above two objectives, PSA identified Meals on Wheels as a beneficiary of World Hunger Day efforts. On 28 May 2018, PSA delivered fresh produce courtesy of RSA Market Agents to one of Meals on Wheels subsidiaries in Pretoria East, Mamelodi.

About Meals on Wheels:

It is a non-profit organization established over 100 years ago. Meals on Wheels believes hunger is the extreme materialisation of poverty and human deprivation. The organisation feeds approximately 18 750 beneficiaries country wide.

The free media exposure generated from this exercise was R1.6 million.

The total free media exposure for all three activations was R4.5 million.

The investment net gain from this project was R4 134 000.00 (total media exposure less total campaign costs).



Social media / digital marketing

With social media gaining strength as a formidable advertising tool, the main objective for the financial year under review was to ensure that all established social media platforms (Facebook, Twitter and Instagram) gain ground and grow. To achieve this, the Marketing Core Business built an information bank in the form of recipes, nutritional articles, fun facts and information as well as videography. As of 30 June 2018, the joint following on PSA social media platforms had increased to 59 000, which translates to an annual growth of 9.3%.

Why is digital marketing important for industry?

“Social media brand-marketing does matter to South Africans. A solid 77% percent of consumers find social media posts from brands to be influential.” - PMA Research, Jinju Wilder

Follow us on: potatoes_za

Potato packaging specifications / SANS 1756

This South African standard was prepared by the National Committee SABS/TC 006/SC 02, Paper, board and pulps – Packaging, paper and board, in accordance with procedures of the South African Bureau of Standards. The standard covers paper bags that are intended for use primarily for the packaging of potatoes that are over 5 kg. The standard was published in September 2017 with the following physical properties of paper:

Tabel 10: Physical properties of paper

1	2	3	4
Property	Requirement		Test method
	Brown sack kraft	White sack kraft	
Grammage, g/m ² (±5%)	70	75	ISO 536
Tensile energy absorption, J/m ² per ply (MD en CD) Nominal..... Actual, min.....	180 160		ISO 1924-3
Tensile strenght (Nat) MD, k/N, min.	1,0 per ply		ISO 3781

All producers are encouraged to contact the Marketing Core Business of PSA for the full packaging standards at: immaculate@potatoes.co.za

Foreign market expansion strategy

PSA together with other vegetable bodies are working closely with the DAFF to compile a South African Vegetable Export Strategy on vegetables and juices. In addition to the DAFF study, PSA Marketing Core Business dedicated its time to carry out desktop studies on the Value Chain of the Potato Industry as well as seeking counsel from leading South African export organisations in fresh produce. This as a drive to build market intelligence on market attractiveness, penetration and development strategies for potatoes outside the Republic of South Africa.

Potato regulatory environment

The sale of potatoes (locally and/or in foreign markets) is governed by the Agricultural Product Standards Act 119 of 1990. At the close of the year under review the local regulations had been submitted to the DAFF for review and amendment. All proposed amendments and product quality inspectors, to name but a few, were discussed. Key changes to the local standards for potatoes pertain to:

Potato Size groups:

- (i) To amend the following primary size groups:

Table 11: Size groups to be amended

Size Group	Minimum mass per tuber	Maximum mass per tuber
Baby	5g	70g
Small	50g	150g
Medium	100g	300g
Large	250g	+

- (ii) To amend the following optional size groups:

Table 12: Optional groups to be amended

Size Group	Minimum mass per tuber	Maximum mass per tuber
Extra Small	30g	50g
Small Medium	90g	120g
Large Medium	150g	250g
Extra Large	+400 g	

Mixed potato size groups and tolerance levels

It was decided not to recommend a “mixed” size group and in the event of non-compliance with the proposed size groups and tolerance levels, that a bag of potatoes be downgraded to a Class 2 or Class 3.

Quality factors on the added “Class 3” in the export standards

It was decided to recommend the addition of a “Class 3” in the export standards for all regions.

Rebirth of national fresh produce markets

Efforts to improve service standards and operations of National Fresh Produce Markets continued in the year under review. Six ailing markets were identified by the DAFF to assist. PSA has offered its support and help to all the ailing markets. The project is on-going and closely monitored by the Project Rebirth National Steering Committee.

Industry trade remedies

The European Union (EU) continues to be the biggest exporter of frozen French fries globally. The South African potato industry started fell victim to the dumping of frozen French fries from EU companies prior 2013. Immediately the

industry applied for a trade remedies such as a safeguard measure which lapsed in 2016. Currently in place is an anti-dumping duty which will be in force until 2021. Below is a diagrammatic representation of the impact of the dumping of frozen French fries on the potato industry in the year under review.

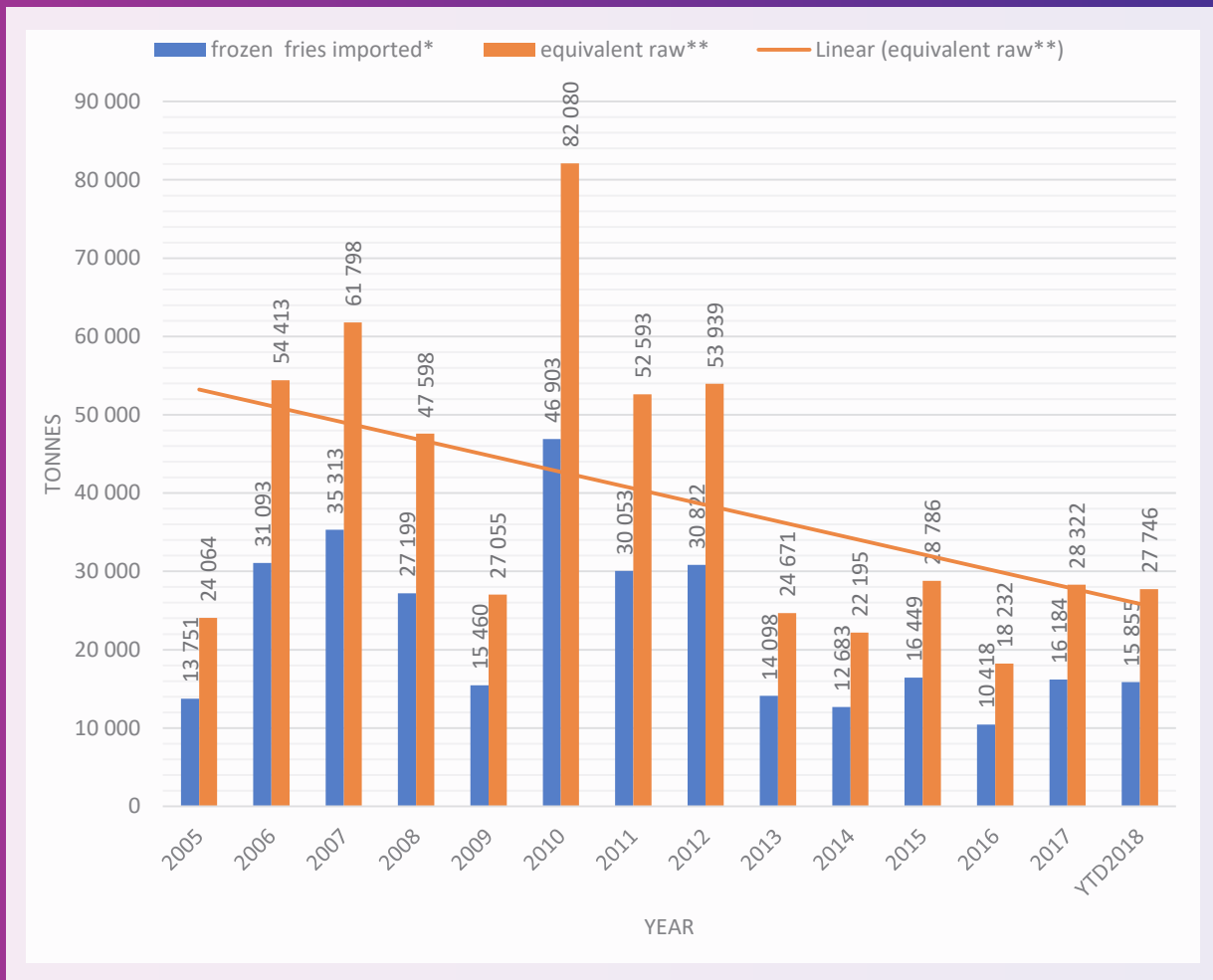


Figure 7: Frozen fries vs raw potatoes

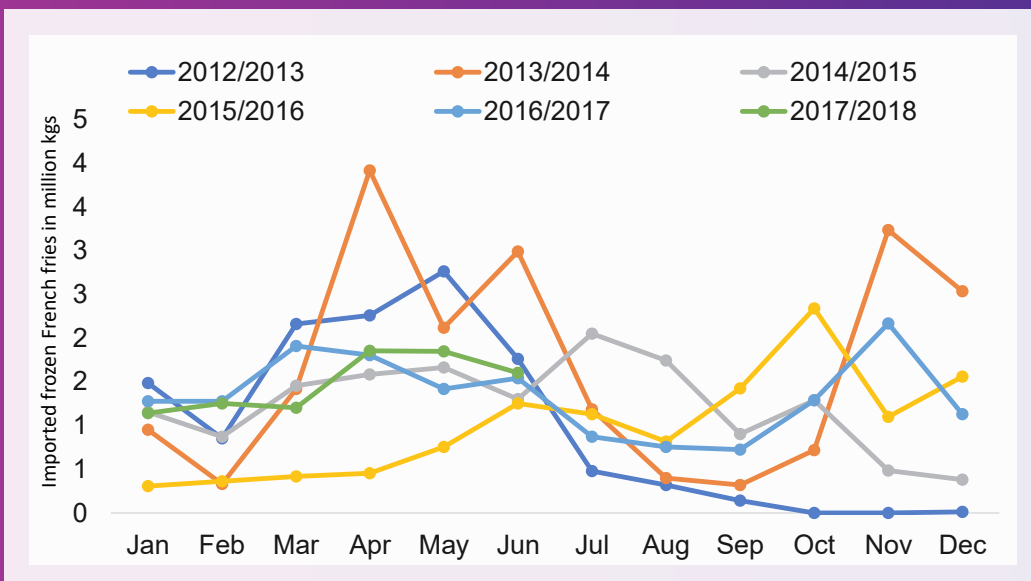


Figure 8: Imported frozen French fries in million kg



TRANSFORMATION



Nomvula Xaba

Manager: Transformation

The aim of the Transformation Core Business within PSA is to ensure the development of Black producers who have an interest in becoming commercial producers. It also ensures that all people are food secured in South Africa, by engaging with the rural communities and assisting them with demonstration plantings where they are taught how to plant potatoes for consumption in an economic way.

During the year under review, PSA has once again been involved in transformation projects with increasing measurable progress. The number of hectares of potatoes planted by Black producers supported by PSA is on the rise and there are producers who have already successfully exited the programme as commercial producers and who are now mentoring other producers.

During the 2017/2018 financial year, PSA focussed on the following projects in respect of Transformation:

- Enterprise Development
- Small Grower Development Programme
- Tertiary Skills Pipeline
- Farm Based Training
- The 5th Bi-Annual Transformation Symposium

Transformation Committee

Table 13: Transformation Committee

NAME	REPRESENTING
Bernhardt du Toit (Chairperson)	Southern Region (Sandveld, Eastern Cape, Ceres, Southern Cape, South Western Cape)
Joseph Bantam	Southern District (Western Cape, Sandveld, Ceres, Southern Cape, South Western Cape)
Siseko Vikilahle	South Eastern District (North Western Cape, Eastern Cape)
Rodney Mbuyazi	Eastern District (KwaZulu-Natal)
Gift Mafuleka	Central District (Gauteng)

NAME	REPRESENTING
Mike Green	Potato producer (appointed by the National Board of PSA (Voluntary))
Jakkie Mellet	Seed potato input supplier (as nominated by the National Seed Potato Growers' Committee)
BM Mpyana	National Agricultural Marketing Council (NAMC)
VACANT	Fertilizer Society of South Africa (FERTASA)
Nomfundo Mthimunye	Association of Veterinary and Crop Associations of South Africa (AVCASA)
VACANT	Processors (Crisp sub-sector)
Riaan Smit	Processors (Frozen chip sub-sector)
Stanford Manthata	Department of Agriculture, Forestry and Fisheries (DAFF)
Shadrack Mabuza	Potato Industry Development Trust (PIDT)
Nomvula Xaba	Transformation Manager
Louis Pretorius	Transformation Coordinator
Elsabé Els	Secretary

Enterprise Development

The goal of the Enterprise Development Programme is to assist in setting up, supporting and growing viable new Black owned commercial potato producing enterprises while the objectives are:

- To develop an economic programme that is aimed at sustainable potato production by New Era producers in order to utilise available land and assist to the maximum benefit of an integrated production system.
- To develop New Era producers to grow and produce commercially in a sustainable way.

Over R6 million was used towards Enterprise Development during the 2017/2018 financial year. This money was used for seed purchase, mentorship, pre-feasibility studies and business plans of New Era producers.

PSA continued to provide support in the form of seed on a four (4) year 25% sliding scale. This is to ensure that at the end of the four-year support period, producers are able to stand on their own and run a sustainable venture. The change in strategy implemented a few years ago has also ensured that there is a substantial increase in the number of hectares amongst the existing Enterprise Development producers and not necessarily a high number of producers on the programme.

Expansion of hectares

The year under review saw two (2) producers expanding their hectares beyond the “rule of thumb” of a commercial unit, namely 30ha. This has come from a lot of hard work and support from many different role-players. The Limpopo and the Eastern Cape DAFF played a big role in ensuring that that these two producers have all the necessary infrastructure to ensure their sustainability in the potato industry.

New producers admitted into the programme

After an intense and vigorous pre-feasibility and business planning process, two new producers from the Limpopo region were identified to participate in the Enterprise Development Programme. The recommendation to support these producers was based on the availability of land and other resources. These new ventures have been a great success with one producer getting 60 tons/ha on his first crop. In preparation for the new financial year, pre-feasibility studies have been conducted for potential producers in the Western Cape, Limpopo, Eastern Cape and KwaZulu-Natal.



Collaboration with other role-players

Since PSA's support only covers the cost of seed, training and mentorship, it is imperative that Enterprise Development producers have linkages with other role-players who can provide the other support required. This could be in the form of access to credit and also access to knowledge. During the past financial year, PSA has been working hard in terms of finding partners who can come on board and ensure that the producers that are being supported are sustainable in the long run. The collaboration with other role-players is also seen as a vehicle that will speed up PSA's efforts in getting the New Era producers to a commercial level as soon as possible. The following are engagements/partnerships that PSA is involved in:

- Free State DAFF- Welkom: The Welkom office has been in partnership with PSA for the past four (4) years. While PSA is providing seed, training and mentorship, the Department supports all producers participating in the Enterprise Development programme with chemicals, fertilisers and machinery. This partnership has gone a very long way in terms of ensuring the sustainability of the producers in this region. One producer has expanded and is well on his way to reaching commercial capacity in the near future.
- NTK/Jobs Fund in Limpopo: PSA entered into partnership with NTK and obtained funding for four (4) producers from the Jobs Fund. PSA is providing seed to these producers while the Jobs Fund covers the other inputs and infrastructure and related things covered by NTK on a credit facility. This has worked very well as the collaboration has ensured that all four (4) producers have access to all the required resources. One producer from this group has been expanded from 10 ha to 20 ha due to the high level of commitment he showed during his first phase of planting. It is PSA's objective that these four (4) producers reach commercial level before their term in the support programme comes to an end.
- Nulandis/AECI collaboration: PSA and Nulandis/AECI has collaborated closely with each other during the past financial year to doing a feasible business plan to further develop New Era producers. Much work has gone towards the development and screening of the producers who can participate in this collaboration. Nulandis/AECI has indicated that they are in a position to support 30ha in Limpopo and this should be viewed as one of many collaborative efforts to come. A lot of effort went into ensuring that the soils and infrastructure of the identified producers is of the required standards. The AECI fund managers, the Independent Development Fund (IDF), has gone an extra mile and conducted a detailed study which ensured that the right candidates were identified.
- McCain/Afgri/Coca-Cola: Coca-Cola has indicated their interest in working with and supporting the New Era producers. McCain has been identified as a starting point while Afgri will provide assistance in terms of conducting pre-feasibility studies and business plans and also provide credit facilities where needed. PSA will still be involved in inputs such as seed and also provide mentorship where necessary. Funding received from Coca Cola will mainly be used for machinery infrastructure as there is a big gap when it comes to machinery and this, if left unattended, will impact on the growth and the sustainability of the New Era producers.

Enterprise Development producers supported

The following producers were supported during the year under review:

Table 14: Producers who received support

Name	Province	Hectares planted
Aubrey Ratjomane	Limpopo	15
Aldrin Lawrence	Limpopo	7.5
David Phike	Free State	7
Edmond Ratjomane	Limpopo	13
Emeldar Maklaar	Free State	5
Johannes Selamolela	Limpopo	15
Enos Mahwai	Limpopo	10
Erence Phooko	Limpopo	10
Isaac Ramasuku	Limpopo	10
Joseph Bantom	Western Cape	2
Manie Brodie	Free State	5
Phophi Raletjena	Limpopo	30
Shadrack Mabuza	KwaZulu-Natal	5
Edward Motibane	Limpopo	5
Siseko Vikilahle	Eastern Cape	8
Vuyani Kama	Eastern Cape	33
Zama Buthelezi	KwaZulu-Natal	5
Zibele Dafeti	Eastern Cape	6
Bambelela Vuma	Eastern Cape	4
Andile Racaza	Eastern Cape	4
Bubele Sigwili	Eastern Cape	4

Small Grower Development Programme

An amount of R133 000 was spent towards the Small Grower Development Programme in KwaZulu-Natal, Eastern Cape and Western Cape provinces. The Small Grower Development Programme receives strong support from DAFF in these areas. Seventeen projects were supported during the year under review and each information day was attended by an average of 45 people exceeding the number of beneficiaries by 800.

Small Grower Development involves growers who plant potatoes mainly for food security with the remaining crop sold to the immediate community. This year, this initiative will expand to schools where the participation of learners will be encouraged. The main goals of Small Grower Development Programme are:

- To disseminate production and business information through trials.
- To give producers practical training on good potato production practices.
- To utilise cultivar or demonstration trials as a way of educating, training and disseminating important production information that is necessary for successful potato production.



The following projects benefited from this programme:

Port Edward	Applesbosch	Mqandula	Port St Johns
Empangeni	Vryheid	Qumbu	Lusikisiki
Nongoma	Genadendaal X 2	Libode	Flagstaff
Wartburg	Umthatha	Tsolo	Stutterheim

Tertiary Skills Development Pipeline

The PIDT annually awards bursaries to deserving students studying towards an agricultural related qualification with the emphasis on potato production. The undergraduate bursary programme is primarily aimed at developing the skills of young talented students at existing potato enterprises. Their development is done through tertiary education at universities and agricultural colleges.

The post graduate bursary programme, on the other hand, is aimed at making a contribution towards ensuring that sufficient post graduates are produced to address the relevant research areas affecting the industry as well as increasing the industry's pool of appropriate qualified scientists. The Research and Development Core Business together with the Transformation Core Business are jointly responsible for funding and identification of the post graduate students.

During 2017/2018, the following bursaries were awarded to students at different institutions throughout South Africa.

Undergraduate students

Table 15 shows the bursaries awarded to undergraduate students.

Table 15: Under graduate student bursaries - 2018

UNDERGRADUATE STUDENTS				
1	Ms Boitumelo Queenneth Moya	Central University of Technology	National Diploma Agricultural Management	3rd Year
2	Ms Lindobuhle Mbele	Potchefstroom College of Agriculture	Diploma in Agriculture	2nd Year
3	Mr Mohlonyang Daniel Kokobane	Tshwane University of Technology	Diploma in Agriculture (crop production)	2nd Year
4	Ms Thembakazi Bheni	University of Fort Hare	BSc Agriculture (Soil Science)	2nd Year
5	Ms Zinhle Charlotte Sambo	University of North West	BSc in Agriculture (crop science)	2nd Year

Post graduate students

Table 16 shows bursaries awarded for post graduate students.

Table 16: Post graduate student bursaries - 2018

POSTGRADUATE STUDENTS				
1	Ms Talana Cronje	University of The Free State	MSc Agriculture- Horticultural Sciences	1st year Masters
2	Ms Nokuthula Cynthia Gamede	University of Kwazulu Natal	MSc Agronomy	2nd year Masters
3	Mr Xola Ngceni	University of Kwazulu Natal	MSc Agriculture- Horticultural Sciences	1st year Masters
4	Ms Gontse Kehumile Joyce Modisane	University of Kwazulu Natal	MSc Biochemistry	3rd year Masters
5	Ms Mvusuludzo Mufandilani	University of Venda	Honours Plant Pathology	Honours
6	Mr Bhekani Sandile Zondo	University of Kwazulu Natal	MSc Agricultural Economics	1st year Masters

Bursary students funded before 2018

Table 17 shows that undergraduate student funded during 2017, which coincides with PSA's 2017/18 financial year.

Table 17: Undergraduate students funded during 2017

UNDERGRADUATE STUDENTS				
1	Ms Zama Siyethemba Nyathi	Mangosuthu University of Technology	National Diploma in Agriculture	3rd Year
2	Ms Thato Friedah Somo	Potchefstroom College of Agriculture	Diploma in Agriculture- Mixed Farming	3rd Year
3	Ms Welile Mlando Dlamini	University of Zulu Land	BSc in Agriculture- Agronomy	3rd Year
4	Ms Jabulile Nxumalo	University of Zulu Land	BSc in Agriculture- Agronomy	3rd Year
5	Ms Mahlatse Motlanthi	University of Limpopo	BSc Agric- Soil Science	4th Year



Rodney Mbuyazi speaking at a Small Grower Development harvesting information day

Table 18 shows the postgraduate students that received bursaries in 2017, which coincides with the PSA financial year.

Table 18: Post graduate students funded during 2017

POSTGRADUATE STUDENTS				
1	Ms Ntombikayise Precious Nkomo	University of Pretoria	PhD Plant Pathology and Microbiology	3rd year PhD
2	Ms Carmen Muller (nee van Niekerk)	University of Pretoria	PhD Nutrition	3rd year PhD
3	Ms Nikki Miguel	University of Pretoria	MSc Microbiology	2nd year Masters
4	Mr Alessandro Rino Gricia	University of Pretoria	MSc Microbiology	2nd year Masters
5	Mr Innocent Noah Mazibuko	Tshwane University of Technology	M-Tech Agriculture	3rd year Masters
6	Ms Kgothatso Andronicah Chauke	Tshwane University of Technology	M-Tech Biotechnology	2nd year Masters
7	Mr Tlangelani Nghondzweni	Tshwane University of Technology	D-Tech Agriculture	3rd year PhD
8	Mr Sifiso Njabulo Mhlongo	University of Kwazulu-Natal	MSc. Agric- Crop Science	2nd year Masters

Internship and Workplace Experience

The internship programme is primarily aimed at providing experiential training opportunities to bursary recipients whose study disciplines that require practical training and exposure as part of their qualification. The workplace programme is aimed at affording the students with the opportunity to obtain workplace experience to enhance their employment opportunities. PSA received an additional amount of R270 000 towards the internship programme. Table 19 shows the students that were placed on an internship programme.

Table 19: Internship and Workplace Experience

INTERNSHIP			
1	Thato Somo	Potchefstroom College of Agriculture	Internship- PSP
2	Zama Siyethemba Nyathi	Mangosuthu University of Technology	Internship- PSP
WORKPLACE EXPERIENCE			
3	Kamogelo Eugina Leburu	Central University of Technology, Free State	PROKON PTA
4	Mamotshabo Malebogo Rachel Rakgwale	Central University of Technology, Free State	PROKON JHB
5	Mlungisi Mzuvukile Sangweni	Central University of Technology, Free State	PROKON PTA
6	Sthembiso Cele	Mangosuthu University of Technology	PROKON KZN
7	Kgolofelo Clifford Moshiana	Potchefstroom College of Agriculture	PROKON PTA
8	Lavhelani Tshilongo	Potchefstroom College of Agriculture	PROKON PTA
9	Tumediso Frumentia Mapudi	Tshwane University of Technology	PROKON PTA
10	Thabo Emmanuel Thomas Thubane	Potchefstroom College of Agriculture	PROKON PTA

Farm Based Training

Enterprise Development

Following the skills audit which highlighted some skills shortages/gaps amongst the Enterprise Development producers, a highly successful financial management training and bookkeeping course for the Enterprise Development producers took place in the following provinces:

- KwaZulu-Natal
- Eastern Cape
- Limpopo

The training was well received by producers based on the review of the course that was done through an evaluation form at the end of the session. Producers however indicated that they need to be offered with this type of training on a regular basis. They also indicated that they still require further training in terms of other aspects of a farming business to make sure that their own business venture is a success.

Training of Commercial Producers' Labourers

PSA, through its Transformation Core Business continued to partner with AgriSeta in terms of ensuring that commercial producers have a skilled labour force. An amount of R499 000 was received and utilised for training.

The 5th Bi-annual Transformation Symposium

The 5th Transformation Symposium was held in Gauteng at the Saint George Hotel and Conference Centre on 7 June 2018. The symposium was attended by approximately 200 delegates from different spheres of the potato industry. The theme of this year's symposium *"APPROACHING POTATO FARMING AS A SUCCESSFUL BUSINESS VENTURE!"* was in line with PSA's aim with its Enterprise Development Programme, i.e. to develop Black producers to produce potatoes commercially in a sustainable way. This year at the Gala Dinner, Mr Phophi Raletjena from Limpopo was announced as the first ever Enterprise Development Farmer of the Year.



Gavin Hill digging up potatoes with a producer and demonstrating certain aspects of the potatoes

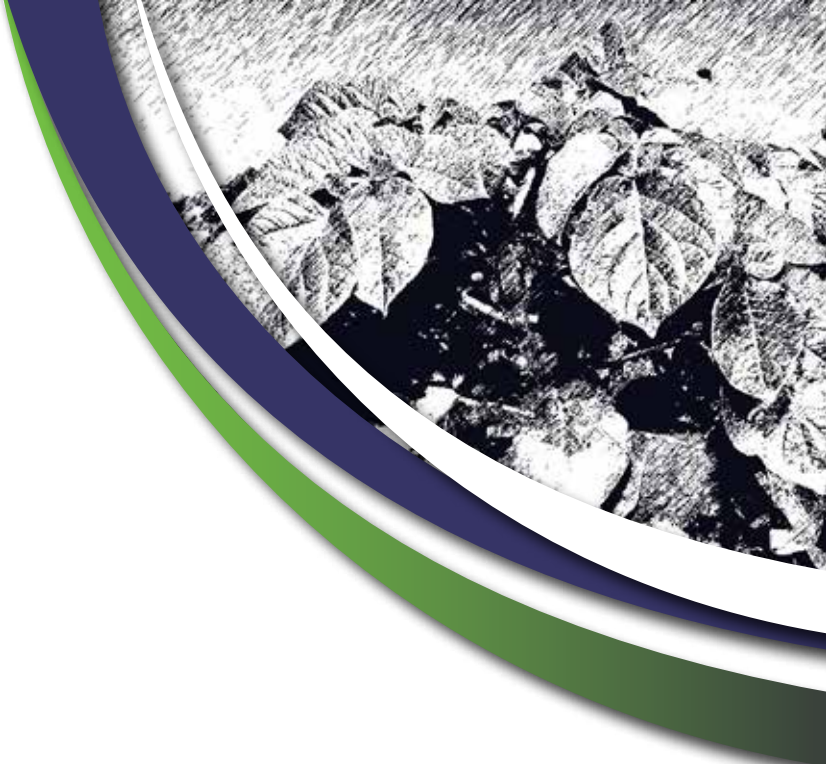


Potato Certification Service

CONTENT

Vision, Mission and Values	45
Report of the Chairperson	46
Report of the Managing Director	48
Business Report	52





VISION

Potato Certification Service's vision is to play a leadership role in the pursuit of a sustained supply of healthy planting material for the South African potato industry.

MISSION

Potato Certification Service's mission is to be an industry-related service, which supports the South African potato industry to perform optimally by ensuring the availability of high-quality planting material.

VALUES

Potato Certification Service strives towards excellence by living the following values:

- Client trust and satisfaction
- Effective utilisation of resources
- Equal opportunities
- Performance orientation



CHAIRPERSONS REPORT



GERHARD POSTHUMUS

CHAIRPERSON

Potato Certification Service (PCS), as well as the seed potato industry, had to overcome quite a number of challenges this year, but also had some highlights. We saw the implementation of the new industry structures after a lot of time and effort were spent to develop efficient and cost-effective structures and systems.

It is still early days, but the new structures seem to be working well, especially where production areas which previously met separately, are now grouped together in the bigger seed production regions. Growers from different production regions and various other role players must now collaborate to escalate matters of mutual interest to the national structures or bodies in the industry. For these structures to function optimally to serve the potato industry, the active participation of seed potato growers and all other role players is crucial. The respective chairpersons must each present mandated requests to the national structures and provide feedback to their constituencies. The growers are therefore urged to attend the various platforms created in the industry to address matters of concern and to get the latest information available.

As the various platforms function, the structures, processes and communication will be streamlined to continuously improve the communication in the industry. The new-look PCS Board of Directors now consists of only five directors instead of ten previously. The functioning of the new Board will be evaluated to determine the best way forward to look after the company's and growers' interests.

Challenges in certification included the amendment of the Scheme with regards to the treatment of seed potatoes, the worst PLRV infections in years, chemical damage and varietal mixes detected. These challenges are difficult to address but if one knows what the risks are, it can be done.

The financial position of the company is healthy, since 732 hectares more than budgeted for were registered. A total of 10 995 hectares were registered under the Scheme. The loan levies are being paid back to seed potato producers and growers who have not been reached are welcome to contact the PCS Head Office in this regard.

This year again, the company lost valuable certification officials, which placed service delivery under strain. However, dedicated certification officials managed to deliver the services with the necessary support from the administrative staff. The growers are assured that the newly appointed staff will be given the best possible training and exposure to have them fully equipped and authorized as soon as possible.

I thank my fellow directors for their passion for the potato industry and looking after the company's affairs so diligently and especially for Sanette Thiar for her commitment and professional manner in which she manages PCS. It is much appreciated. I would also like to thank the new Independent Certification Council of Seed Potatoes (ICCSP) Chair, Adv. Les Kügel, for his inputs to ensure that the ICCSP's service provider has the means to deliver the certification service. I would also like to take the opportunity to thank Dr. Keetch, outgoing ICCSP Chair, for his many years of dedication to the seed potato industry.

Seed potato growers are encouraged to keep on producing seed potatoes despite the challenges. Ensuring a constant supply of healthy plant material is the foundation of the potato industry.

Kind regards

G. POSTHUMUS
CHAIRPERSON



MANAGING DIRECTOR'S REPORT



SANETTE THIART

MANAGING DIRECTOR

Potato Certification Service (PCS) continues to provide the potato industry with a sustained supply of healthy planting material despite quite some challenges experienced in the year under review.

The newly composed structures impacted significantly on the structure of PCS's Board of Directors as well as the Independent Certification Council for Seed Potatoes (ICCSP). The new structures have met twice, and the benefits can already be seen, although there are some teething problems that will be addressed as we find our feet.

THE COMPANY: POTATO CERTIFICATION SERVICE

PCS is responsible for the certification of seed potatoes, auditing of tissue culture and mini tuber production facilities, as well as dissemination of information based on data generated by the certification scheme.

In terms of B-BBEE, PCS has been verified as a Level 8 Contributor with a B-BBEE procurement recognition level of 10%.

Board of Directors

The Board of Directors now consists of only 5 directors compared to ten in the past. The four Regional Chairpersons of the Seed Potato Growers serve as non-executive directors and contribute to raise transparency, trust and buy-in and they serve as ambassadors for certified potato seed. Directors are now appointed for a two-year term in line with the election of the chairmen of the regions at the Seed Potato Growers' Forum.

Mr. Gerhard Posthumus was appointed Chairman of the Board with Mr. Jakkie Mellet as Vice-Chairman. The Chair of the Board is elected from the Chair or Vice-Chair of the National Seed Potato Committee and serves as Vice-Chair of the ICCSP, as well as director on the Potatoes South Africa (PSA) Board of Directors representing the seed potato

growers. The Chair of the ICCSP attend the meetings of the PCS Board of Directors as observer to ensure that its service provider has the financial means and competent staff to fulfil its role and that the budget makes provision for all the requirements of the ICCSP.

The Executive Committee consists of the Chairperson, Vice Chairperson and Managing Director. The smaller Board of Directors places a heavy burden on the directors, but they are doing an excellent job looking after the company's affairs. Their dedication of time and expertise to this company is admirable.

Clients of the company

The seed potato growers are the clients of the Company. The active seed growers, in other words, all the growers who have for the past 4 years registered plantings for the certification of seed potatoes under the South African Seed Potato Certification Scheme (Scheme), are currently 157 active seed growers, of which 125 have registered plantings in the past year. During the same period, three new growers joined the seed potato industry.

Potato house

PCS has a 26% share in Potato House and Potatoes South Africa (PSA) has a 74% share. The building was originally purchased for an amount of R4 124 243 to which PCS contributed a loan to the value of R1 072 303. Potatoes South Africa is thanked for their role in the maintenance of this asset. Mr. Jakkie Mellet, PCS Vice-Chair, serves as director looking after PCS's interest.

Staff

PCS had four resignations in the past year. Gareth Windt, certification official in Pietermaritzburg, resigned and joined Simba. Fortunately, the skills and expertise will not be lost for the potato industry. Because of Gareth's resignation, Leon Zietsman was transferred to Pietermaritzburg. Leonard van der Walt and Michael Schulze were appointed as trainee certification officials in Christiana in August 2017, with David Steyn in January 2018 also in Christiana.

The resignations of two regional managers, namely Gideon Truter and Albert Theron, in April and May 2018 respectively, dealt PCS a huge blow. Both these two gentlemen have left the potato industry but are still engaged in agriculture. We wish them all the best with their new careers. Marlé Theron, administrative assistant in Middelburg has also resigned. Johandré Breitenbach was promoted to Regional Manager for Mpumalanga, Limpopo and Gauteng and was transferred to Lydenburg, with his wife Elisca, appointed on a part-time basis to assist with the administration in the office. I am sure they will make a big difference in the region. Subsequently Phillip Buckle and Ngwedi Legodu have been appointed as trainee certification officials in Christiana in May and June 2018 respectively. All the newly appointed certification officials have been employed previously and I am confident that they will quickly get to grips with certification. Ngwedi is the first female certification official appointed by PCS and we wish her all the best with the particular challenges she might experience. During the reporting year, Pieter Leibbrandt and Johan Germishuys fully qualified on all aspects of certification. Leon Zietsman, Leonard van der Walt, Michael Schulze and David Steyn are making good progress with their training. All trainees are encouraged to gain as much knowledge and experience as fast as they can. Congratulations to everyone who was promoted and appointed. Although the learning curve will be steep and interesting, I trust that you will enjoy every moment and that you will have long and fruitful careers at PCS.

The administrative personnel and my staff at Head Office are thanked for their continued support to me, our directors, certification officials and growers. You are an amazing team supporting us in every way. I would also like to especially thank André Wessels, our Technical Manager, for his role in continuously developing our database which is the backbone of our record keeping system and data. Without your insight it would not have been possible.

Once again thank you to all the staff for your positive attitude and passion for the potato industry!

Finance

The financials for the period 1 July 2017 to 30 June 2018 are briefly discussed.

The budgeted total income of R19 626 411 was based on 10 223 hectares. The actual registered hectares came to 10 995, which were 732 more than expected. This brought a total income of R20 272 300, which resulted in R645 889 more than budget. The expenses amounted to R19 487 370, which was a 5% saving. Due to the additional hectares registered, PCS was able to end the financial year on a net surplus of R784 930, after budgeting for a deficit of R970 903.

The budgeted hectares, actual hectares and the difference in the various regions are as follows:

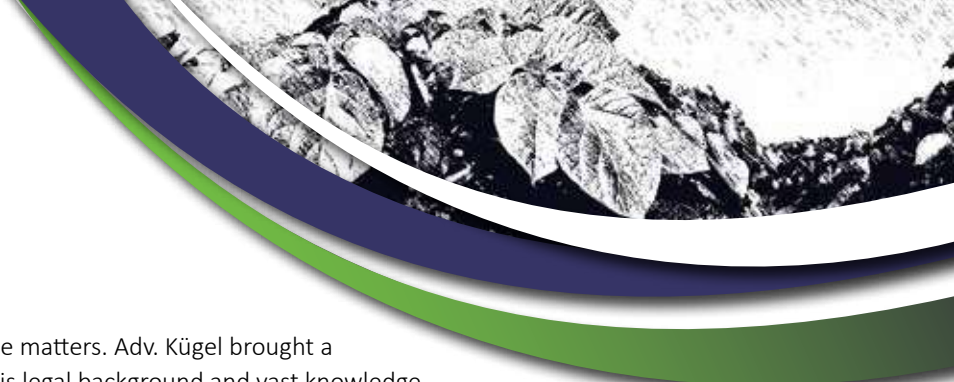
Region	Ha budgeted	Jun actual	Deviation
South	413	359	-54
Sandveld	250	259	+9
Ceres	66	38	-28
Southern Cape	97	62	-35
East	2198	2206	+8
KwaZulu-Natal	1259	1349	+90
North Eastern Cape	539	485	-54
Eastern Free State	400	372	-28
West	7020	7770	+750
Northern Cape	1000	1465	+465
Western Free State	5150	5202	+52
North West	770	965	+195
Eastern Cape	100	138	+38
North	592	620	+28
Mpumalanga	334	392	+58
Limpopo	256	227	-29
Gauteng	2	1	-1
Total	10223	10955	+732

PCS is still a going concern that continually strives to deliver a professional and cost-effective service amidst fluctuating hectares.

Committees and forums

The committees and forums within the potato industry constitute organized platforms where much of communication with growers and other stakeholders in the industry takes place. The administration of the seed potato grower meetings and Seed Potato Growers' Forum is now done by Potatoes South Africa and the Seed Potato Growers' Forum will be held every second year on the day before the PSA Congress. The Seed Potato Traders' Forum was disbanded and provision is made on the PCS website for the contact details of owners of varieties.

The National Seed Potato Committee is the main platform where all role players of the industry have access to. This resulted in a much smaller ICCSP with industry representation, as well as technical members, with Adv. Kügel as



Independent Chairperson, to consider Scheme matters. Adv. Kügel brought a different level of expertise to the table with his legal background and vast knowledge of the Plant Improvement Act and certification schemes.

I would like to thank Dr. Keetch, who served the potato industry for close to 20 years by dedicating his time, energy, knowledge and expertise with the emphasis on the establishment of a certification scheme of note to ensure good quality planting material for the benefit of the potato industry as a whole. Dr Keetch was appointed Chairperson of the Independent Certification Council for Seed Potatoes (ICCSP) on 3 February 1998. Since then he has continuously served the potato industry with his vast knowledge of phytosanitary aspects, the agricultural sector, the Plant Improvement Act and specifically the South African Seed Potato Certification Scheme. Potato Certification Service presented him with a lifetime award at the Seed Potato Growers' Forum in 2016 when celebrating the company's 21 years of service delivery to the potato industry. He stepped down as Chairperson of the ICCSP after the Seed Potato Growers' Forum in 2017. PSA presented him with a *Solanum tuberosum* Meritum award for his contribution to the potato industry.

PCS has the privilege to serve on various other platforms such as the Plant Improvement Certification Forum, the PSA Research Committee, the Department of Agriculture, Forestry and Fisheries (DAFF) CEO Forum and the Potato Quarantine Pest Committee etc. PCS is also honored to be involved in the United Nations Economic Commission for Europe (UNECE) Bureau and Rapporteurs meetings on setting standards for trade in seed potatoes as well as to deliberate on matters and develop guides for certification of seed potatoes amongst others. The Technical Manager and I had the privilege to attend the 10th World Potato Congress in Cusco, Peru, the origin of the potato. This was an amazing opportunity where a lot of networks were strengthened, and knowledge were gained.

On behalf of the company, I thank each committee member for your time and dedication to the potato industry. Without your contributions we will not be able to fulfil our duties.

To the respective chairmen of the PCS's Board and National Seed Potato Committee, Mr. Gerhard Posthumus, and the ICCSP, Adv. Kügel, thank you for the time, energy and passion that you put into your respective mandates. Your commitment to the potato industry is noteworthy.

General

A lot of dedication and hard work goes into the production and certification of 11 million mini tubers and more than 7 million bags of certified seed potatoes. The certification staff work tirelessly with the growers to ensure that the seed potatoes are true-to-variety and that the phyto-sanitary status complies with the tolerances set by the Scheme. It has been a challenging year on all fronts, but in the end I can look back and say we have achieved success.

Thank you to all the companies involved in our company and seed potato production, whether it be sponsoring the Seed Potato Growers' Forum, assisting with diagnostics, research, chemical control, human resources or legal advice. Your input, collaboration, support and commitment are much appreciated. People in the potato industry are passionate about what they do. With this passion comes huge responsibility. Let us keep on working together to certify good quality planting material for the potato industry, honoring and acknowledging each of our roles to get potatoes on our plates.

Keep up the good work and "Certify for the Future"!

Sanette Thiar
Managing Director





BUSINESS REPORT

The purpose of certification is to certify seed potatoes of which the phyto-sanitary status in terms of diseases and pests falls within predetermined norms and that are true to type. To ensure the sustainability of potato production in South Africa, the Scheme is based on disease-free material as starting material.

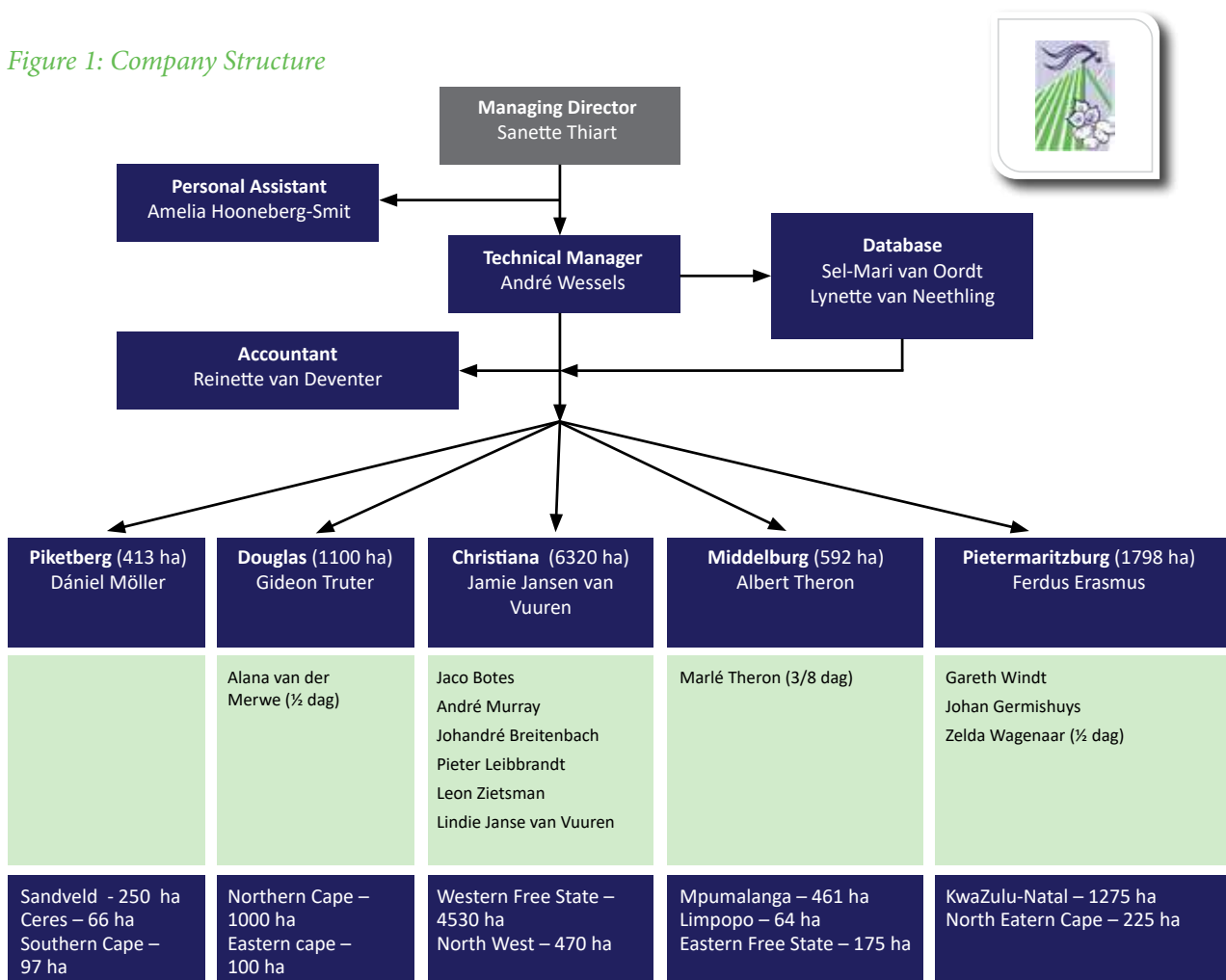
Potato Certification Service

Potato Certification Service (PCS) is a Non-Profit Company (NPC) without members, established in 1995, with the mandate to certify seed potatoes and is contracted as service provider of the Independent Certification Council for Seed Potatoes (ICCS), appointed as authority in terms of the South African Seed Potato Certification Scheme (Scheme) by the Minister of Agriculture, Forestry and Fisheries. PCS is audited by the Department of Agriculture, Forestry and Fisheries (DAFF), as PCS performs the functions and duties in terms of a statutory scheme. The Scheme is promulgated in terms of the Plant Improvement Act, 1976 (Act No. 53 of 1976).

Personnel

The company's Head Office is in Potato House in Perseus Technopark, Pretoria, with five regional offices located throughout the country, namely in Piketberg, Douglas, Christiana, Middelburg and Pietermaritzburg. The regional offices and staff members are strategically placed to render the best possible service in the most affordable manner to growers. The structure of the company is reflected in Figure 1.

Figure 1: Company Structure



In the reporting period, two regional managers, Gideon Truter and Albert Theron, a certification official, Gareth Windt, as well as Marlé Theron, part-time administrative assistant, resigned. We wish them all the best with the change in their careers. Johandré Breitenbach has been promoted to Regional Manager: Mpumalanga, Limpopo and Gauteng with relocating the office to Lydenburg. Elisca Breitenbach was appointed on a part-time basis to support Johandré with the administrative tasks. For the interim it was decided to provide services to the Northern and Eastern Cape on a rotation basis from the Christiana Regional office, until a fully qualified certification official with sufficient experience can be transferred to Douglas. Leon Zietsman was transferred to Pietermaritzburg to fill the gap left by Gareth's resignation. Leonard van der Walt and Michael Schultze were appointed as trainee certification officials in Christiana as from August 2017 and David Steyn, Phillip Buckle and Ngwedi Legodu were appointed as trainee certification officials in Christiana in January, May and June 2018 respectively. Ngwedi is the first female certification official to be appointed in the company.

Committees and Forums

The committees and forums within the potato industry constitute organized platforms where most communication with growers and other stakeholders in the industry take place. Aspects that need to be considered at the National Seed Potato Committee are tabled by the regional seed grower meetings. The various aspects are then debated and, if it is in national interest, the committee refers recommendations and resolutions to the relevant bodies and committees involved in the seed potato industry.

Board of Directors

The management of the company is set out in the company's Memorandum of Incorporation (Moi) and Board Charter. The Board Charter is evaluated and reviewed annually to ensure that PCS is managed in accordance with good corporate governance.

With the change in industry structures approved at the Seed Potato Growers' Forum in September 2017, the Board of Directors have been restructured in line with the rest of the industry and the Moi and Board Charter have been amended accordingly. The Board is now comprised of four non-executive directors, each representative of the 4 seed potato production regions, namely Northern, Southern, Eastern and Western regions, with one executive director in the Managing Director position. Mr. Gerhard Posthumus was re-elected as Chairman of the Board, with Mr. Jakkie Mellet re-elected as Vice-Chairman. The Executive Committee consists of the Chairman, Vice-Chairman and Managing Director. Because of the restructuring, the following directors resigned, namely Messrs. Frans Engelbrecht, Niekie Visser, André Coetzee, Guybon Osler and Garrick Christiane. Later, Mr. Llewellyn de Kock was followed-up by Mr. Johan van Greunen, representative of the Southern Region and Mr. JJ van de Velde was followed-up by Mr. Gavin Hill, representing the Eastern Region.

Table 1: Board of Directors

Director	Position	Representative for:
Gerhard Posthumus	Chairman	Western region
Jakkie Mellet	Vice-Chairman	Northern Region
Johan van Greunen	Director	Southern Region
Gavin Hill	Director	Eastern Region
Sanette Thiar	Managing Director	Potato Certification Service

The directors are entrusted with the financial and human resource matters of the company and are fulfilling an extremely important role looking after all the growers' interest in the company.

Independent Certification Council for Seed Potatoes (ICCSP)

The Independent Certification Council for Seed Potatoes (ICCSP) has also undergone major restructuring and now consists of an independent, unattached Chairman, with industry representatives consisting of the Chair of Potatoes

South Africa, the Chair and Vice-Chair of the National Seed Potato Committee representing the seed potato growers, a third member from the National Seed Potato Committee representing the table potato producers, the Forum for Nuclear Material Producers (NUMPRO) and processing industry, as well as technical representative from Potato Laboratory Services (PLS), the Managing Director of PCS as well as the Research and Development Manager of Potatoes South Africa. The independent chairman was appointed by the seed growers serving on the ICCSP. Three representatives of the Department of Agriculture, Forestry and Fisheries (DAFF) attend Council meetings but do not have voting rights. Table 2 below reflects the present composition of the ICCSP.

Table 2: Composition of the ICCSP

Council Member	Position	Representative for:
Adv. Les Kügel	Chairperson	Independent
Industry representatives		
JF van der Merwe	Member	Potatoes South Africa- Chair
Gerhard Posthumus	Vice-Chairman	National Seed Potato Committee- Chair
Jakkie Mellet	Member	National Seed Potato Committee- Vice Chair
IB Oosthuizen	Member	National Seed Potato Committee- Additional member
Technical representatives		
Dr. Niederwieser	Member	Potatoes South Africa- Research and Development Manager
Marieta Botha	Member	Potato Laboratory Services- Chief Executive Officer
Sanette Thiar	Member	Potato Certification Service- Managing Director
DAFF Representatives		
Me. Joan Sadie	Registrar	Plant Improvement Act- Directorate of Plant Production
Mnr. Gilbert Mediroe	Assistant Director	Agricultural Pests Act- Directorate, Agricultural Product Inspection Services
Me. Rorisang Mahlakoana	Scientist Production: Pest Risk Analysis	Agricultural Pests Act- Directorate: Plant Health

The ICCSP is responsible for the formulation of policy guidelines in respect of the Scheme, as well as to ensure that the Scheme is run efficiently and sustainably in the interest of the potato industry as a whole. It is furthermore the ICCSP's duty to continually evaluate the Scheme and propose amendments where required. The treatment of seed potatoes has been written into the Scheme and was submitted to the Registrar for consideration. The Protocol has been completed and awaits publication after approval of the Scheme by DAFF.

Regional Seed Grower Meetings

The seed potato industry has been restructured to be in line with the rest of Potatoes South Africa's structures, according to its constitution. The four Regional Seed Potato Grower meetings ensure communication from ground level upwards to the various organisations responsible for the different aspects that need to be addressed, as well as communication and feedback down to ground level. The Chairpersons are elected by the growers from all the production areas in the region to serve as the mouthpiece of that specific region and serve on the National Seed Potato Committee, with additional members based on the number of certified bags contributed. The Chairpersons of these regions serve as non-executive directors on the PCS Board of Directors.

National Seed Potato Committee

The National Seed Potato Committee is a committee of Potatoes South Africa (PSA) and considers matters related to the seed potato industry, the demand for seed potatoes and issues related to the trade in seed potatoes. The identification of research and marketing needs in respect of seed potato production is also the committee's responsibility. The committee furthermore makes recommendations to the ICCSP about national requirements in respect of the certification of seed potatoes and proposes amendments to the Scheme. The National Seed Potato Committee includes members of all role players in the seed potato industry and PSA are responsible for the administration of all seed potato grower meetings.

Table 3: National Seed Potato Committee

Committee Member	Position	Representative for:
Gerhard Posthumus	Chairperson	Western Region- Western Free State
Johan Greyling	Member	Western Region- Western Free State
Werner du Plessis	Member	Western Region- Western Free State
Frans Engelbrecht	Member	Western Region- North West
André Coetzee	Member	Western Region- North- and Eastern Cape
Jakkie Mellet	Vice-Chairperson	Northern Region- Mpumalanga, Limpopo and Gauteng
Gavin Hill	Member	Eastern Region- KwaZulu-Natal
Garrick Christiane	Member	Eastern Region- North Eastern Cape
Johan van Greunen	Member	Southern Region – Sandveld, Ceres and Southern Cape
IB Oosthuizen	Member	Processing sector – French fries
Hanco van Zyl	Member	Processing sector- Crisps
Dawie Ras	Member	NUMPRO
Jan van Zyl	Member	Table producer
Wouter van Amstel	Member	Table producer

The Chairperson of the Seed Potato Growers' Forum is also Chairperson of the National Seed Potato Committee and represents the seed potato industry on the National Council and Board of Directors of PSA.

Mr. Gerhard Posthumus was elected as Chairperson of the National Seed Potato Committee and the Seed Potato Growers' Forum. Mr. Jakkie Mellet serves as Vice-Chairperson. The two-year term expires at PSA's Congress and the Seed Potato Growers' Forum in September 2019.

Seed Potato Growers' Forum

The Seed Potato Growers' Forum (Forum) serves as a discussion forum in respect of resolutions related to the seed potato industry. The Forum is responsible for the:

- determination of needs within the seed potato industry;
- identification of research needs;
- identification of needs in respect of the certification of seed potatoes;
- identification of needs in respect of the selling of seed potatoes;
- making recommendations to the National Seed Potato Committee and the ICCSP regarding amendments to the Scheme;
- referral of resolutions to the respective committees; and
- for the dissemination of information.

The nineteenth annual Seed Potato Growers' Forum was held at the Premier Hotel OR Tambo in Rhodesfield, Johannesburg, on 27 September 2017. The Forum was dedicated to finalizing the industry structures and to elect the various office bearers.

Mr. JP van den Berg (L 017) was again awarded the Bayer Seed Potato Grower of the Year Trophy, with Mr. Frans Engelbrecht and his son, Michiel, from Firna Boerdery (L 002), Mr. Kevin Cockburn and Dean Brown from Pidelta (Pty) Ltd (N 058) and Mr. Craig MacFarlane from Loch Buighe Farms (N 127), as finalists. Wesgrow was presented with a certificate of recognition since the winner plants for them.

Seed Potato Certification

During the period under review, 11 091 hectares were registered (planting date) by 125 seed potato growers, which included 78 hectares registered for mini tuber production. Currently there are 153 active seed growers. The active seed growers are all the growers who have, for the past 4 years, registered plantings for certification of seed potatoes under the Scheme.

Table 4 indicates the hectares registered per production area for G0 to G7 planted for the planting dates, 1 July until 30 June each year, as well as the number of 25 kg bags certified on those plantings.

Table 4: Registered hectares and certified yield

Region	2014/15		2015/16		2016/17		2017/18*	
	Plantings (Hectares)	Yield (25 kg Bags)	Plantings (Hectares)	Yield (25 kg Bags)	Plantings (Hectares)	Yield (25 kg Bags)	Plantings (Hectares)	Yield (25 kg Bags)
Ceres	126	37 036	37	35 690	65	33 438	34	30 211
Eastern Cape	51	29 538	95	68 591	132	44 300	138	59 956
Eastern Free State	296	235 853	273	73 203	366	274 294	370	254 326
Gauteng	-	-	-	-	1	17	1	-
KwaZulu-Natal	1 432	1 081 961	1 417	733 028	1 211	960 449	1 344	905 275
Limpopo	207	171 558	126	99 272	221	168 656	272	165 482
Mpumalanga	468	389 632	365	211 051	330	286 023	419	253 530
North West	509	973 588	597	1 083 705	717	1 213 028	932	1 037 154
North Eastern Cape	336	336 952	541	162 695	630	256 977	485	282 034
Northern Cape	674	491 597	849	462 953	1 273	719 792	1 460	661 503
Sandveld	644	297 850	339	175 344	228	109 119	300	26 995
Southern Cape	76	65 439	149	66 972	66	52 578	60	38 414
Western Free State	4 961	2 923 555	4 996	3 189 880	5 195	2 994 347	5 198	2 896 705
RSA	9 780	7 034 559	9 784	6 362 406	10 436	7 113 018	11 012	6 611 587

2017/2018 Not complete*

The Western Free State production region produced 42% of the seed potatoes certified in South Africa in 2016/2017. Not all the seed potatoes from the hectares registered in the period under review have been certified.

The certified yield per annum varies between 6 and 7 million bags. The number of mini tubers certified annually is more than 11 million, with 11.7 million last year. There are seven mini tuber production facilities that are approved by the ICCSP, namely: Rascal Seed Research Laboratories, Potato Seed Production, Advanced Potato Propagation, Ceres Aartappels, Super Spud Seed Potatoes, Maluti Mini Tubers and Griekwaland-Wes Bpk.

The generation distribution indicates that Generation 1 to Generation 4 seed potatoes form the biggest portion of certified seed potatoes (89%), with the G6, G7, G8 and Standard Grade certified at 11%. Due to heavy Potato Leaf Roll Virus infection experienced in the reporting period, significantly more G8 seed potatoes have been certified compared to 10 years ago, but the percentage of early generation seed potatoes remained stable. These figures might change slightly as the final number of bags of seed potatoes certified on the plantings registered late in the reporting period is not yet available.

Table 5: Generation distribution (25 kg Bags)

Generation	2007/2008	2017/2018*
G1	205 461	173 876
G2	555 017	1 003 848
G3	1 536 474	1 942 378
G4	1 792 852	1 542 051
G5	1 144 562	1 205 104
G6	326 842	310 927
G7	97 687	28 678
G8	139 655	400 260
Std Grade	17 657	4 465
Total	5 816 207	6 611 587

**Not complete*

Considering the variety distribution of the top ten varieties that were certified during the past decade, as reflected in Figures 2 and 3 below, tremendous changes took place. The top ten varieties consist mainly of varieties with Plant Breeders' Rights, except for Mondial, Up-to-Date and Hertha, which are open commercial varieties.

2007/2008

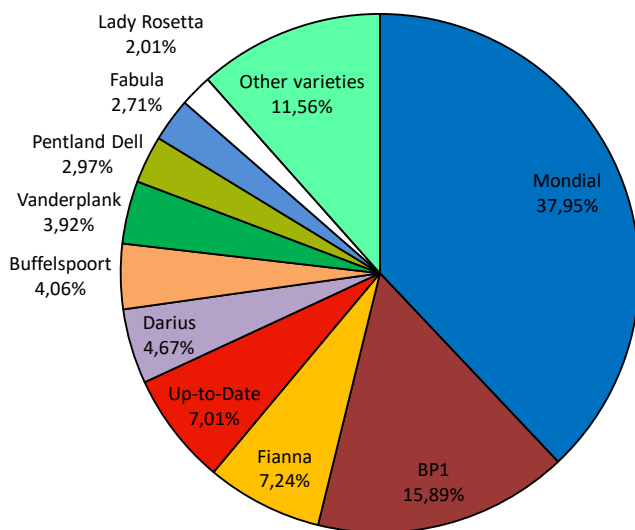


Figure 2: Variety distribution as in 2007/2008

*2017/2018**

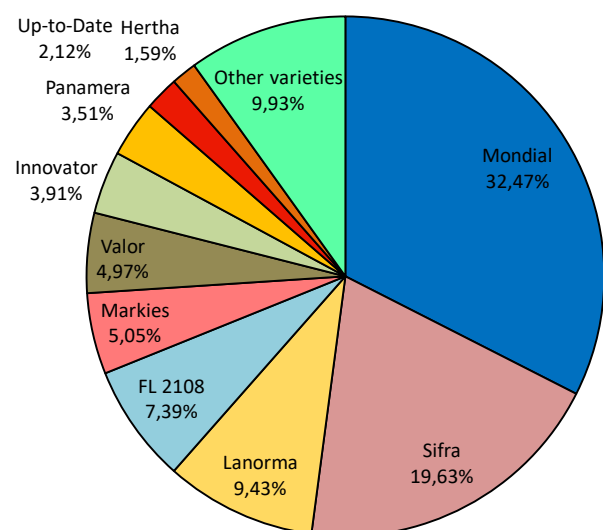


Figure 3: Variety distribution as in 2017/2018
Not complete

The other smaller varieties planted are indicated in Figure 4 (2007/2008) and Figure 5 (2017/2018*).

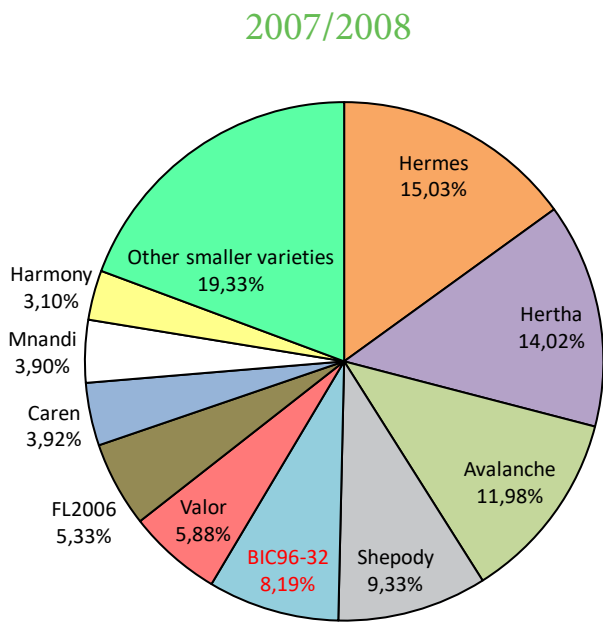


Figure 4: Composition of other smaller varieties in 2007/2008

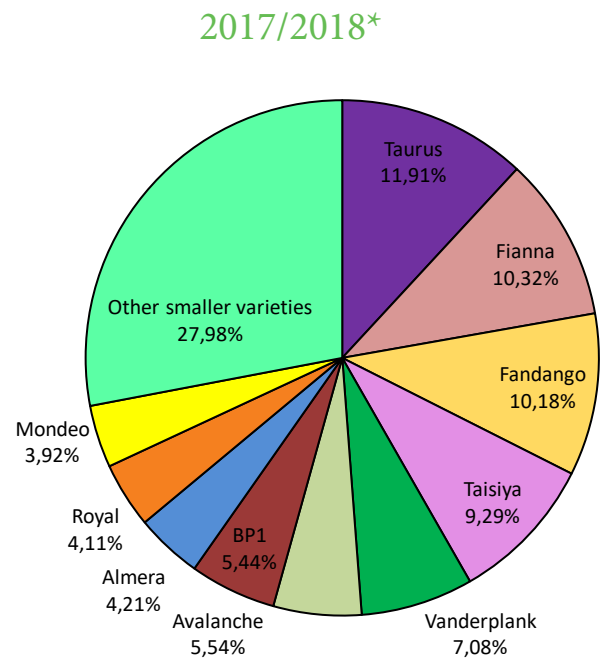


Figure 5: Composition of other smaller varieties in 2017/2018*

*Not complete

Regarding diseases, Figure 6 shows the percentage of virus free samples nationally.

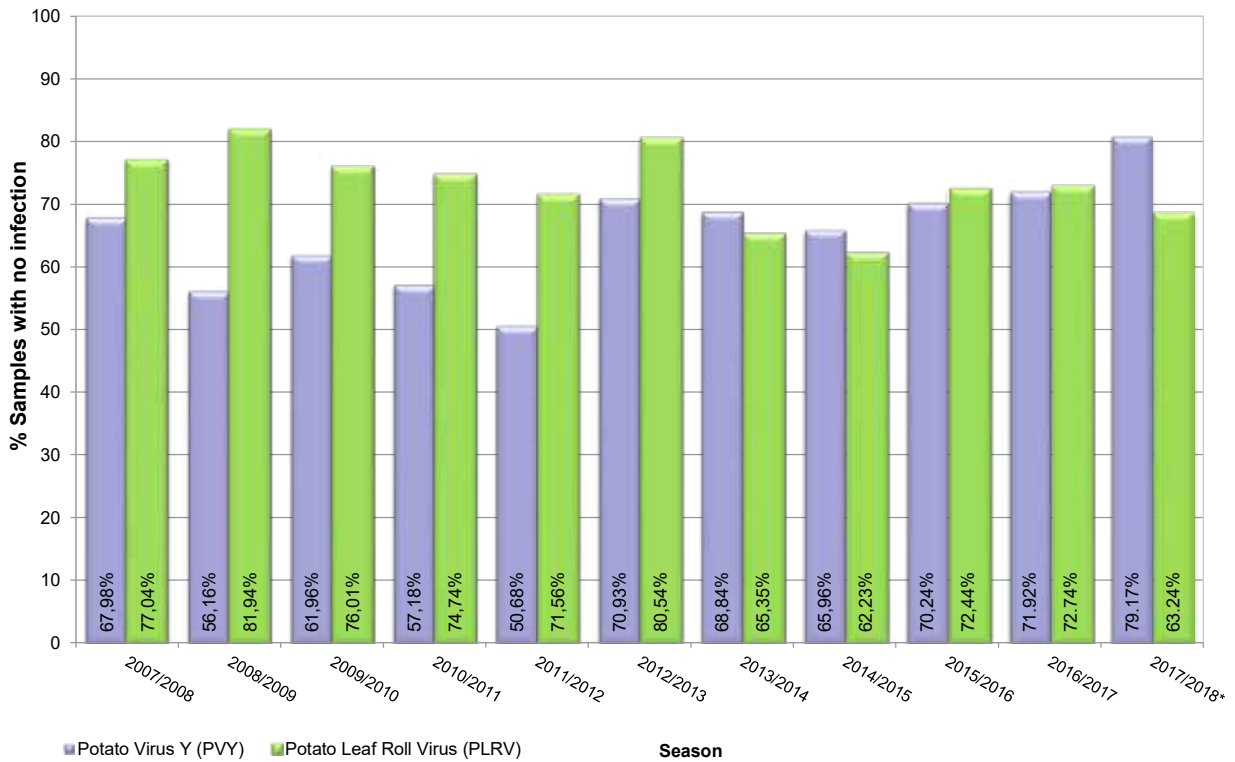


Figure 6: RSA: VIRUS OCCURRENCE (Field samples: G0 - G7 planted)

Heavy Potato Leaf Roll Virus (PLRV) infections occurred in the reporting year, which lead to a virus workshop to address the problem. Data on the virus content of sources planted, compared to the certification and post-control virus results of the subsequent plantings, showed heavy challenges with regards to PLRV infection, in spite of sources with no or very little virus planted. For the past 4 years, no seed potatoes with Potato Tuber Necrotic Ringspot Disease (PTNRD) were found.

The Scheme has been amended to include the treatment of seed potatoes for Black Dot / Silver Scurf, as well as treatment for *Rhizoctonia* for own planting. The dispensation for the treatment of seed potatoes for Black Dot / Silver Scurf is still in place whilst awaiting publication of the amended Scheme. During 2016/2017 (complete year) 130 907 x 25kg bags of certified seed potatoes were treated. Most regions treated seed potatoes, except the Northern Cape, North West and Eastern Cape. No complaints were received with regards to treated seed potatoes.

The Potato Quarantine Pest Committee, under the chairmanship of the Directorate Inspection Services, DAFF, is the watchdog of the potato industry for quarantine pests. Bacterial wilt, caused by *Ralstonia solanacearum*, Potato Cyst Nematode (PCN- *Globodera rostochiensis*) and wart disease, caused by *Synchytrium endobioticum*, are officially controlled in terms of the Scheme. Import regulations and biosecurity also falls under the jurisdiction of this committee.

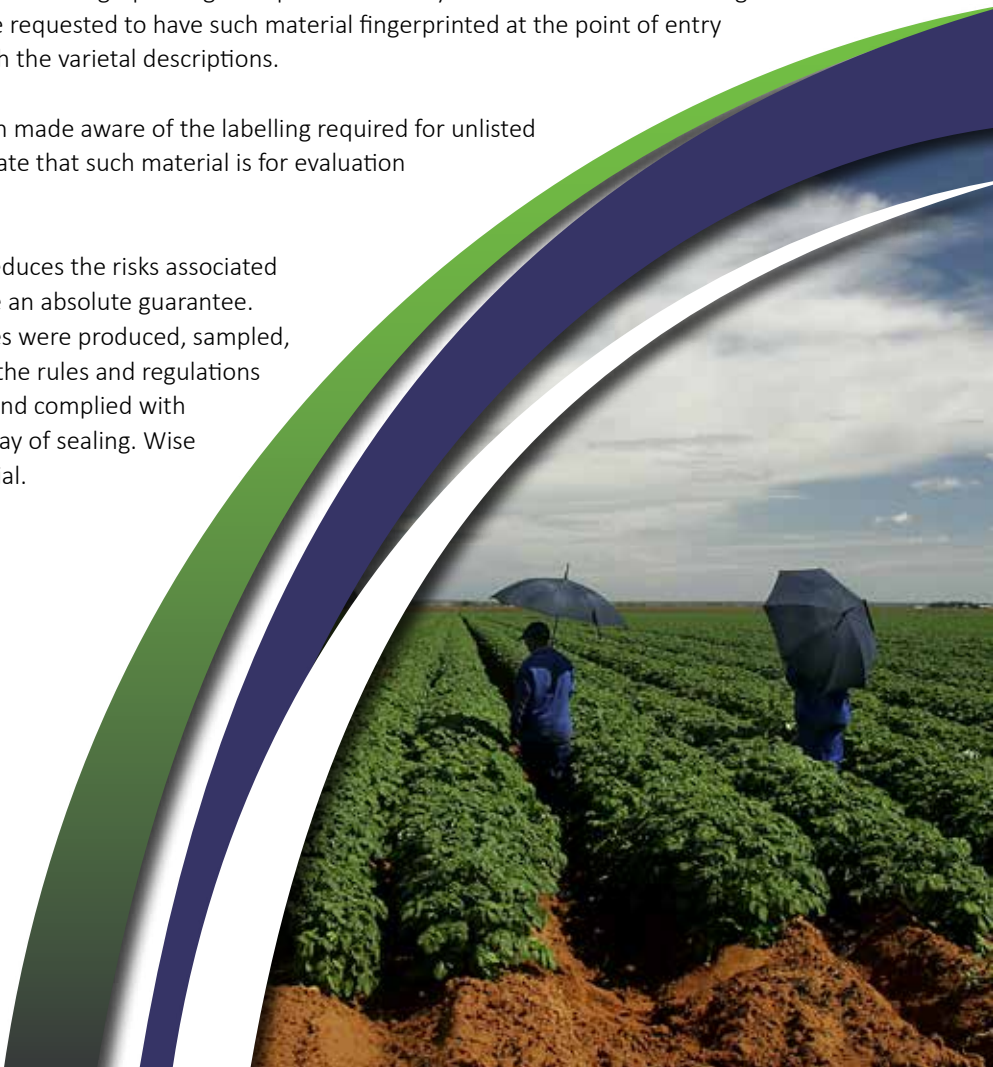
With regards to prohibited organisms, *Ralstonia solanacearum*, the bacterial wilt-causing organism, was detected in one seed potato planting, upon which a delegation from the Directorate Inspection Services with PCS, visited the unit and appropriate action was taken. Farms listed on R.110 for wart disease, are also in the process of being sampled to detect the presence and/or absence of *Synchytrium endobioticum*. No *Globodera rostochiensis* infections have been detected in many years.

The Scheme is based on phyto-sanitary status, as well as variety purity. Mixing of varieties was only found in 0.174% of all seed certified. Where mixing took place, the growers were notified in writing and the necessary corrective action was instituted. Out of the 7.1 million bags certified, mixing detected affected only 12 417 bags. Registrations had been corrected after detection of switching of trial varieties. Switching of varieties are much more difficult to detect visually, since the whole planting is of a different variety than the one intended and varieties descriptions are not always available of trial varieties. It is therefore extremely important that the material maintained and produced *in vitro* should be true-to-type. The importance of DNA-fingerprinting of imported or newly established material was again emphasized, and owners and agents were requested to have such material fingerprinted at the point of entry into the genebanks and to supply PCS with the varietal descriptions.

Owners and agents of varieties were again made aware of the labelling required for unlisted varieties and that the labelling must indicate that such material is for evaluation purposes only.

Planting certified seed potatoes greatly reduces the risks associated with potato production, but does not give an absolute guarantee. Certification means that the seed potatoes were produced, sampled, examined and sealed in accordance with the rules and regulations of the Seed Potato Certification Scheme and complied with the requirements of the Scheme on the day of sealing. Wise potato growers only plant certified material.

Please visit www.potatocertification.co.za





Plantovita

CONTENT

Vision and Mission	61
Report of the Chairperson	62
Report of the Managing Director	64
Business Report	69





VISION

To render laboratory services to the seed potato industry in respect of tracing specific pathogens and to comply with all relevant requirements in order to determine whether seed lots comply with the certification standards as prescribed by the South African Seed Potato Certification Scheme.

MISSION

Potato Laboratory Services strives to render optimal services to the South African potato industry which:

- Are based on scientific principles.
- Can be executed by qualified and competent technologists.
- Is managed on sound economic principles.
- Take into account the trust and needs of the clients of the company.



CHAIRPERSON'S REPORT



JOHAN VAN DEN HEEVER

CHAIRPERSON

Dear reader

The purpose of the designation of the Coen Bezuidenhout Seed Test Centre (Pty) Ltd (CBS), now known as Plantovita, as the control laboratory of Potato Laboratory Services (PLS), was the following:

There should be a centre of expertise in the Industry, which, by means of scientific procedures, training and standardization, controls the consistency of the tests carried out by the different regions. It is in the interests of the effective application and credibility of the Scheme.

When you read the Plantovita CEO's Management Report, you will notice that the control laboratory is absolutely achieving the above goal. Each requirement is met point for point:

- Scientific procedures
- Training
- Standardization
- Consistency of tests
- Control

For the laboratories, which tolerate critical criticism when test results are not accepted, the contribution to the credibility of the Scheme is indeed a never-ending challenge.



Apart from the given that our tests must meet the highest possible requirements, the integrity and independence of any of the PLS laboratories in the contribution to credibility of the Scheme is not negotiable.

After a few years in the hands of the Dry Bean Producers' Organisation (DPO), Plantovita has since 2011/2012 again belonged 90% to the seed growers by way of shares. It is therefore largely in the hands of us, the owners to support and empower Plantovita to build upon the existing credibility already achieved through years of service delivery, technical progress, scientific research and belief in what they have achieved.

We as Directors (representing the shareholders) provide this necessary support and empowerment to Plantovita to the extent to which and how we take ownership of the company and staff.

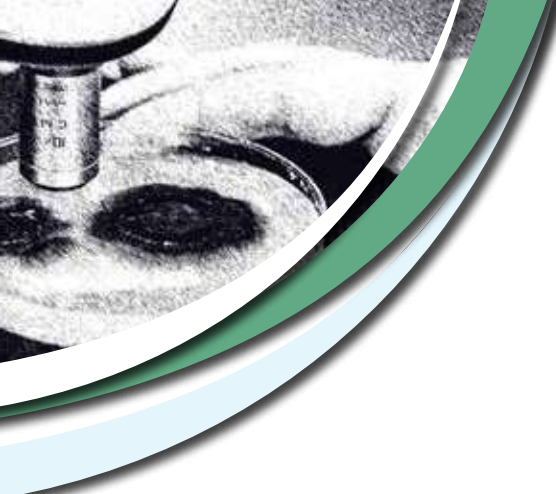
The importance of one PLS laboratory measured against others is, regardless of the size of the different regions and turnover of the business, not subordinate to the other. The same tests are being done and the same standards are expected. Everyone makes an effective contribution to the Scheme from where it is located in production regions. However, we must not lose sight of the fact that Plantovita's role and function as a control laboratory of the industry has much more to do than just the routine testing of samples for certification.

If PLS was a forest, Plantovita was the tallest trees that catch the most wind, precisely because of its extensive responsibility in PLS.

We as owners can provide the necessary support to our CEO, Marieta Botha and Technical Manager, Anel Espach, by firstly empowering ourselves with knowledge of the function and location of Plantovita as a control laboratory in PLS. And secondly, to take on and understand our role as co-owners of the company.

Johan van den Heever
Chairperson





CHIEF EXECUTIVE OFFICER REPORT



MARIETA BOTHA

CHIEF EXECUTIVE OFFICER

So, I mentioned to the Plantovita staff at Ms Anel Espach’s Quality Coordinating Committee (QCC) meeting that the visit to another institution just opened my eyes to the high standards implemented and maintained over time in Potato Laboratory Services (PLS).

Because I have been behind the lab desks for over two decades and worked under high pressure, I know how grumpy one can become about another document you need to complete, another measurement, another quality requirement, more training, etc. as if you didn’t already have enough to deal with.

And so, after many years, one can fall into a comfort zone and become blind to what is built into you, because you see it every day and, in your world, it is a given. So, if you get visitors one day and suddenly see processes and procedures through their eyes, you are proud to realize that the standard required and delivered in PLS has never stagnated.

Despite years of knowledge, experience and advancement in PLS, the test is usually the one procedure suspected in the overall certification process, when the results do not meet expectations.

In-house, the success of test results is dependent on two main factors:

- Firstly, the disease content of the *sample submitted* and
- Secondly, the correctness of *the test procedure*

The rest of the factors that can affect the disease status of the seed potatoes e.g. lice pressure, environment, cultivation practices, seasonal infection, etc. are beyond the control of the laboratory. I dare say that the Technologist who runs the test is 99% of the time not even aware of external seasonal influences. Which is completely correct. It creates the neutral environment in which tests are conducted impartially and without external influences.

In order to deliver standardized and high quality work in all the laboratories involved, we set ourselves the following requirements:

- The test results for a sample- should it be possible to test it at the same laboratories at the same time- should be comparable

And that

- Test results reflect the disease content of the particular sample, taking into account the ELISA test constraints and sampling variation.

What is being done in PLS to meet the above standards?

Training

For every technologist or assistant involved in any way with the samples or performing the test, training is required. Testing Technologists must undergo two weeks of training at Plantovita's control laboratory. It is the task of the Technical Manager of PLS, Ms Anel Espach, to evaluate the newly trained Technologist at the end of this official training in her (the Technologist's) own environment and to confirm her skill and reliability in performing the test.

At no time are Technologists left to their own fate. Plantovita, as the control laboratory in PLS, offers technical support at all times, identifies gaps, and makes sure everyone involved in the testing process is competent for the task at hand. If there are test-related problems in a laboratory, Plantovita will send an expert to the region for problem identification and further training, or the Technologist must come back to Pretoria for retraining.

Training of the Technologists is not limited to a once-off two-week session at Plantovita. The annual PLS workshop aims at extensive training. The workshop is a neutral environment in which technical issues are discussed. The workshop can also include practical sessions at Plantovita's discretion during which the test is physically performed by all participants. Thus, it is determined whether test results, performed in the same environment, by the various technologists are correct and comparable.

Inhouse training in the laboratories is an ongoing process. Schedules exist according to which assistants receive training in sample preparation, washing of glassware, cleaning of facilities, use of appliances etc. to name but a few. Assistants are tested to determine whether they are competent for the task for which they are appointed. Assistant training is a requirement for both permanent and contract workers.

Sample integrity and identity

Sample integrity and identity must be retained throughout the certification process.

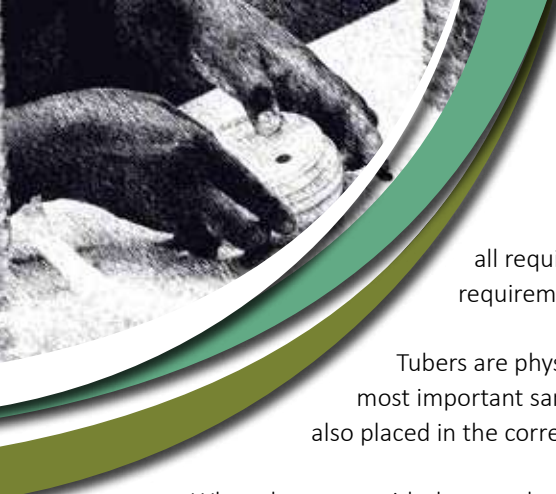
An official seed list from Potato Certification Service (PCS) is the work instruction to the laboratory indicating how the sample should be handled.

For example, in the case of Bacterial Wilt: *Should the sample be pre-warmed?*

Or in the case of virus samples: *Has the sample been treated for lifting dormancy?*

The technologist therefore responds to the seed list instruction. No samples may be tested before the official seed list, i.e. instruction is received from PCS.

Upon receipt of a sample, details on the bags (seals, labels, type of sample, quantity of tubers, variety, etc.) are compared with the data appearing on the seed list. All deviations between sample and seed list details must be reported in writing to PCS. No tests may be performed until the identity of the sample has been confirmed by PCS for



all required data. The Technologist may not make any corrections to the seed list. The requirement is that a new seed list be issued by PCS with the necessary changes.

Tubers are physically counted, listed and placed in crates with permanent labels attached. The most important sample details appear on these labels. The seal and label that were on the bag are also placed in the corresponding crate to further support the identity of the sample.

When the crates with the samples go to the lab for testing, all details on the permanent label as well as the seals and labels inside the crates are checked and written down to ensure it compares with the sample details on the test list.

Peelers and the assistants behind the roller press must complete registers of who prepared which sample with which particular method for the particular test. Containers or sachets in which maceration occurs as well as antibody-coated plates are clearly labelled with the sample numbers.

The preservation of integrity, identity and traceability of a sample in PLS is therefore dealt with seriously. This is a process that begins with confirming the identity of a sample upon receipt at the laboratory. Infinite documentation ensures that the sample is traceable, up to 7 working days after the disclosure of the results to PCS. Sample and test data are mandatory kept in the laboratory archives for 5 years.

A breeder should at no point doubt that the test result of a sample does not relate to the particular sample or samples delivered to the test laboratory.

The test protocol

PLS has come a long way from when the included manual of the imported test packages was the “protocol” of the Technologist.

The word protocol is described in the dictionary as rules, prescriptions, etiquette, standards. For each specific pathogen and the approved testing method, there are official rules, prescriptions, labels, standards or a test protocol in PLS today. Currently there are 13 official PLS test protocols.

A test protocol is the Holy Book of the PLS Technologist. Each prescription is set for the successful execution of the test. If the protocol indicates that an ELISA plate should be washed 4 x with a 5 minute soaking period between each wash, then this must be done. If the protocol states that juice has to stand for at least 20 minutes before being loaded onto the plate, it is for good reason and should be done. The protocol is not just a guideline, but sets the specific requirements for each test.

The Test Protocol therefore, standardizes the testing processes between regions. If the Technologist adheres strictly to the prescripts in the protocol and there are no other negative external influences, the test results for a sample- should it be possible to test it at the same time at the different laboratories- should be comparable.

The test protocol specifies the requirements for each PLS test laboratory ranging from the necessary equipment to the official documents. The PLS Code of Conduct, which indicates which types of samples may be tested by an Independent Certification Council of Seed Potatoes (ICCSP) approved PLS laboratory, also appears herein.

Test protocols are reviewed annually. If any changes are required, it is updated and a revised version is issued. Previous versions are declared obsolete and must be replaced with the latest issue.

The official protocol carries so much weight that the presence and availability of its latest version in the test laboratory is an audit requirement. This is the PLS standardized handbook for reading, referencing and verifying correct procedures.

The test

Checks and balances exist that require a test before the result can be signed off by a Technologist.

Visual appearance of the plate

For an experienced Technologist, the visual appearance of the ELISA image in the final step is already a very good indication of the success of the test.

With the exception of the positive controls and pits in which colour develops due to the presence of the specific pathogen, the rest of the plate should show no / minimal colour development or background.

Background is a term that is widely used outside the laboratory. Background cannot be limited to a single pit on a plate. If there were external influences (interference) of some kind during the testing process, the experienced Technologist would be able to identify background or external influences on a plate.

For both the Virus and Bacterial tests, there is a dedicated row on the image (side row) in which no colour should develop during the last step. If colour develops in this row, the optimal performance of the test can be questioned.

Visual colour development or lack thereof, at specific dedicated positions on an ELISA plate is a sign of the success of the test and an indication that external influences do not generate false positives.

The positive and negative controls

The development of both positive and negative controls above or below certain regulatory values (Optical Density) is a requirement for the test's success. These controls can be described as the balances to which the test performance is measured.

The reaction of the negative control is extremely important. Lack of discoloration indicates that there were no external influences during the testing process, which could lead to background or false positive readings.

The positive controls measure the sensitivity and specificity of the test.

Sensitivity: How well does the test react?

Specificity: Does the test (antibodies) see the specific pathogen tested for?

The above factors are, as far as the success of the test is concerned, the main requirements and expect the test results to reflect the disease content of the particular sample, taking into account the ELISA test constraints and the variation in sampling.

To meet the checks and balances is not a short cut, and is the outcome of the careful application of the following actions:

- Absolute execution of the test method as prescribed by the test package provider.
- Correct application and storage of all reagents and chemicals within expiry dates and temperature requirements thereof.
- All appliance and equipment must be in optimal working order. Maintenance schedules are compulsory and must be documented.
- Measurement of environmental conditions within regulatory values of the laboratory, warm rooms, as well as all other work areas, cold rooms, refrigerators and incubators.
- Good housekeeping- correct use of cleaning products for sterilization and cleaning of rooms, work surfaces, appliances and glass and plastic ware.

- The success of the compulsory audit conducted annually during the test season by the Technical Manager of PLS and in which the correct application of all the above actions is measured and investigated.
- Competency tests (circuit tests) that are performed on a routine basis and in which the comparability of results between the different test laboratories is measured.

Despite the user-friendly features of the ELISA...

- It is a robust test
- A reliable test
- As far as economy is concerned, it is measured by rand and is cheaper than other methods
- For high turnover on a commercial scale, this is an ideal method

... signing off the test results by a Technologist is a summary of the success of a set of requirements that must be met.

The quality requirements and professional touch in the PLS testing laboratory does not stand back to the standard of laboratory service in any other industry. The dedication of staff who daily do routine tests without relaxing standards is remarkable and deserves recognition.

Today we can rightly say:

- PLS is in touch with developments regarding methodology and pathogens in the international field.
- Upgrading of services and knowledge does not stagnate and today PLS is able to deliver services at a molecular level.
- PLS enjoys excellent communication and relationships with test package providers as well as with experts in relevant situations abroad.
- PLS can participate confidently in international circuit tests that include test laboratories from various other countries.
- As far as the commercial testing of seed potatoes by ELISA is concerned, the Technologists in PLS are the experts. This is what these people daily concern themselves with and there are no other local laboratories testing seed potatoes on this scale.

My personal thanks to the PLS staff for your hard work. For your honesty and integrity. That you never give up. That you think creatively and stay positive within the routine of your work and often unfounded criticism.

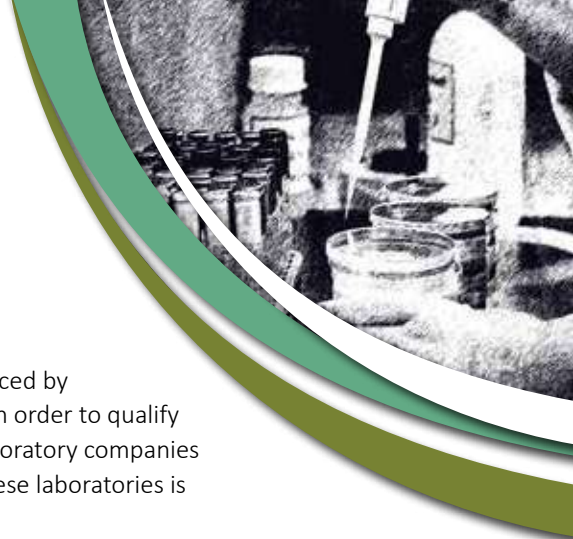
Special thanks to Anel Espach, Technical Manager of PLS for your huge contribution in the scientific and technical evolution of laboratory services over the past few years.

Thanks also to the Plantovita Directors and President, Gavin Hill, for ownership, earnestness, guidance and positive contribution to the growth of service delivery in PLS.

MARIETA BOTHA
CEO PLANTOVITA













BUSINESS REPORT



The laboratories in PLS

The South African Seed Potato Scheme determines that the seed potatoes produced by registered seed potato growers must comply with certain disease requirements in order to qualify as certified seed potatoes. In the South African potato industry there are five laboratory companies which conduct tests in order to determine the disease status of seed. Each of these laboratories is strategically located with a view to serving a specific production area.

The following represents an overview of the location, service area and ownership of each company:

Name of Company	Location and Service Area	Owner and Management
		Wes-Kaap-moerkwekers-vereniging
Sandveld, Southern Cape and Ceres		
		Wesgrow Seed-Potatoes
Western Free State and North-West		
		KwaZulu-Natal Seed Growers
KwaZulu-Natal and North-Eastern Cape		
		Griekwaland-wes Korporatief
Northern Cape and Eastern Cape		
		Plantovita shareholders: Sandveld Laboratory Services Wes-Vrystaat Aartappelmoerkwekers KwaZulu-Natal Laboratory Services Noord-Kaap-laboratoriumdienste Solani Labs Dry Bean Producers' Organisation
Mpumalanga, Limpopo, Gauteng and the Eastern Free State		

Each of the laboratory companies functions as a private entity. The term Potato Laboratory Services refers to these laboratory companies as a group and does not influence individual ownership. Plantovita fulfils the role of controlling laboratory in this group of companies and must ensure that standards determined in the official PLS protocols are continuously maintained by all the laboratories. The function of the controlling laboratory is explained extensively in the Industry Report.

All five companies must be registered with the Department of Agriculture, Forestry and Fisheries in terms of the Plant Improvement Act as facilities for conducting disease tests. As controlling laboratory Plantovita audits the laboratories annually in the testing season. With due consideration of the recommendation of Plantovita to the Independent Certification Council for Seed Potatoes (ICCSP), a laboratory earns the authorisation of the ICCSP from year to year to conduct tests as required in terms of the Scheme. The standard for audit requirements is determined in terms of the official protocol of PLS. The protocol has been compiled on the basis of international standards (ISO) and good laboratory practice.

There is a sixth laboratory company, Messrs Solani Labs, which makes use of the services of Plantovita in terms of an agreement to conduct disease tests for the growers of Mpumalanga, Limpopo, Gauteng and the Eastern Free State. Growers in these regions are shareholders in the company and the Board of Directors has been determined with due consideration thereof. The purpose of this company is to be able to determine a unique PLS registration tariff for this service area. This is determined on the basis of the hectares registered and test costs.

Ownership and management of the controlling laboratory Plantovita

10% of the company belongs to the DPO and 90% to the seed potato growers by way of shares. The seed potato growers own the shares via the regional laboratories of which they are owners. The percentage shareholding differs from region to region and is based on the contribution of each shareholder to the turnover of Plantovita over a specific period.

Every shareholder is represented on the Board of Directors by a Director appointed by the company or organisation owning the shares. Potatoes South Africa is represented by three Directors although it does not own any shares in Plantovita. The Chairmen of the Board of Directors is elected independently.

Notwithstanding the percentage of shares, every Director has equal access and voting rights as far as the passing of resolutions is concerned.

Current Board of Directors consists of the following persons:

Director	Position	Represents the following company or organisation
Gavin Hill	Chairperson	Independent
Jakkie Mellet	Vice-Chairman	Solani Labs (Pty) Ltd
Gerhard Posthumus	Director	Wesgrow Seed-Potatoes (Edms) Bpk
JJ van de Velde	Director	KwaZulu-Natal Laboratory Services (Pty) Ltd
Johan van Greunen	Director	Sandveld Laboratory Services (Edms) Bpk
Andre Coetzee	Director	Noord-Kaap-laboratoriumdienste (Edms) Bpk
Chris Kleingeld	Director	Dry Bean Producers' Organisation
Dr Fienie Niederwieser	Director	Potatoes South Africa
Jan van Zyl	Director	Potatoes South Africa rika

The Chief Executive Officer is appointed by the Board of Directors. This official also fulfils the role of Manager: Laboratory Services. At present this position is filled by Ms Marieta Botha.

Plantovita is technically managed by Ms Anel Espach. In the interest of the technical welfare of all the laboratories, Anel also fills the position of Technical Manager of Laboratory Services.

The rendering of services in PLS

For certification purposes: The respective laboratories conduct the following tests / render the following services with regard to determining the presence of diseases and other requirements contained in the South African Seed Potato Certification Scheme:

Laboratory	Pathogen	Technique	Type of sample
Sandveld laboratory	Virus diseases: PVY, PLRV	ELISA	Seed potatoes: Field samples
Western Free State laboratory			Leaf samples: G0 and private material
KwaZulu-Natal laboratory	Bacterial diseases: Wilt (<i>Ralstonia solanacearum</i>)	ELISA	Seed potatoes: Field samples
Northern Cape laboratory			
Only Sandveld laboratory	Golden cyst nematode: <i>Globodera spp.</i>	Seinhorst cyst elutriation	Soil samples
Plantovita	Virus diseases: PVY and PLRV	PCR	Seed potatoes: Field samples <i>In vitro</i> material
	Virus diseases: PVY, PLRV, PVA, PVM, PVX, PVS, TSWV	ELISA	Seed potatoes: Field and post-control samples Disputes: Nationally, Solani Labs excluded G0 material: Leaves and seed potatoes Private leaf samples <i>In vitro</i> material Imported material
	Bacterial diseases: Wilt (<i>Ralstonia solanacearum</i>) The following <i>Erwinia spp:</i> <i>Pectobacterium carotovorum subsp carotovorum</i> <i>Pectobacterium carotovorum subsp brasiliensis</i> <i>Pectobacterium atrosepticum</i> <i>Dickeya dianthicola</i> <i>Dickeya dadantii</i>	ELISA and conventional plant out methods	Seed potatoes: Field samples G0 material <i>In vitro</i> material Imported material Confirmation of all positive wilt readings nationally
	Cultivar purity Of units presented for certification	Diffused lighting	Seed potatoes (for cultivar purity)

Extended diagnostic services:

As controlling laboratory, Plantovita strives, inter alia, to render extended diagnostic services to the industry as a centre of expertise.

Diagnostic samples are ad hoc samples which do not qualify as official and / or certification samples and usually consist of a couple of tubers/plants/stems with or without disease symptoms.

The testing centre has been equipped to this end and has the expertise for the rendering of these services. To date the Diagnostic Section of Plantovita has identified the following pathogens or physiological deviations:

Bacterial diseases:

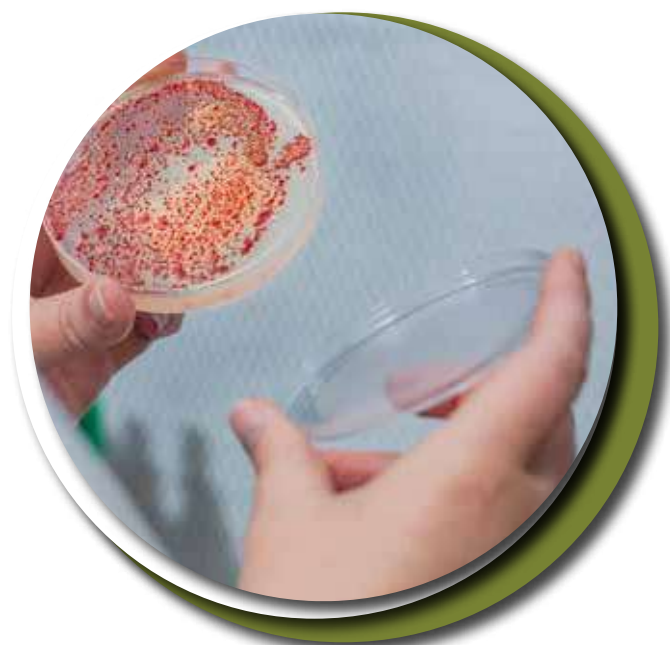
- *Ralstonia solanacearum* – Bacterial wilt
- *Pectobacterium carotovorum subsp carotovorum*, *Pectobacterium carotovorum subsp brasiliensis*, *Pectobacterium atrosepticum*, *Dickeya dianthicola*, *Dickeya dadantii* – Black leg / Soft rot (non-specific)
- *Streptomyces spp* – Common scab

Fungal diseases:

- *Macrophomina phaseolina*: Charcoal rot
- *Sclerotinia sclerotiorum*: White mould
- *Verticillium dahlia* and *V. albo-atrum*: Verticillium
- *Phytophthora erythroseptica*: Pink rot
- *Pythium ultimum var. utlimim* and *P. Debaryanum*: Leak
- *Phytophthora infestans*: Late blight
- *Botrytis cineria Pers. :Fr.*: Grey mould
- *Phoma exigua var. foveata* and *Phoma exigua var. exigua*: Gangrene
- *Alternaria solani*: Early blight
- *Rhizoctonia solani*: Stem cancer
- *Fusarium spp.*: Fusarium dry rot and Fusarium wilt
- *Alternia alternata.*: Brown spot and Black pit
- *Spongospora subterranea subsp subterranea*: Powdery scab
- *Helminthosporium solani*: Silver scurf
- *Colletotrichum coccodes*: Black dot / Anthracnose

Physiological deviations:

- Internal brown spot and heat necrosis
- Hollow heart
- Black heart
- Tuber malformation
- Sand splits / Splits and cracks
- Jelly-end
- Enlarged lenticels
- Elephant hide
- Frost damage



The management and structure of the PLS companies for 2017/2018

Every laboratory company is managed by a Board of Directors consisting of Directors elected/appointed by the owner/ shareholder of the company.

The Board of Directors is at liberty to appoint a Manager who will be responsible for the financial and administrative welfare of the company. The Manager may be appointed from their numbers or be contracted to render these services.

For the year under review the management and structure in PLS was as follows:

Name of Company	Responsible Technician	Personnel Composition	Secretarial Services	Administrative and Financial Management	Technical Management
Sandveld Laboratory Services	Soreen Gouws	<ul style="list-style-type: none"> Laboratory Technician Laboratory Assistants Contract Workers 	Soreen Gouws (agreement with PSA)	Soreen Gouws Board of Directors	Anel Espach Plantovita
Wesgrow Seed-potatoes	Cecilia Nel	<ul style="list-style-type: none"> Laboratory Technician Laboratory Assistants Contract Workers 	Wesgrow Seed-Potatoes	Gerhard Posthumus	Anel Espach Plantovita
KwaZulu-Natal Laboratory Services	Helen Anderson	<ul style="list-style-type: none"> Laboratory Technician Contract Workers 	Zelda Wagenaar (agreement with PCS)	Marieta Botha PSA-Finances Board of Directors	Anel Espach Plantovita
Noord-Kaap-laboratorium-dienste	Marizelle van der Merwe	<ul style="list-style-type: none"> Laboratory Technician Contract Workers 	Alana van der Merwe (agreement with PCS)	Andre Coetzee	Anel Espach Plantovita
Plantovita	Anel Espach	<ul style="list-style-type: none"> Laboratory Technicians Laboratory Assistants Contract Workers Cleaner 	Marne Brits	Marieta Botha DPO Finances Board of Directors	Anel Espach Plantovita

In November 2014 the Executive of Plantovita instructed Ms Botha to resign in terms of the financial and ground level management of all the laboratory companies. The controlling laboratory will therefore only be involved in the technical management of the regional laboratories in the future, but may still consult with regard to any other management aspects should the need arise. During this period the financial department of PSA indicated that they would no longer be able to be involved in the financial management of any of the laboratory companies on account of personnel restraints. From 1 July 2015 each of the companies in the PLS Group has therefore been obliged to manage its finances and administration under the guidance of the individual Boards of Directors.

In conclusion Potato Laboratory Services undertakes the following:

- All samples of any client shall be handled confidentially and the integrity in respect thereof shall be maintained and the sample shall be stored safely.
- Results generated in respect of any sample shall be sent to the client on a confidential basis and records in respect thereof shall be stored safely for five years.
- Records with regard to the receipt of the sample, as well as the processing and testing thereof and the results obtained, shall be generated, maintained and later stored such that it is safe and confidential.
- All samples shall be tested in terms of protocols and procedures of Potato Laboratory Services.

A grower must be able to be confident that –

- the test results in respect of a sample – should it be possible to test it at the different laboratories at the same time – shall be comparable; and
- the test results shall reflect the disease contents of the specific sample – with due consideration of the limitations of the test and the variation in sampling.



Prokon

CONTENT

Vision, Mission and Values	75
Chairperson's report	76
Chief Executive Officer's report	78
Business report	81





VISION

To set standards and exercise control over the quality of agricultural produce to promote local and foreign marketing and to ensure that consumers receive products that are safe and represent quality.

MISSION

The delivery of a comprehensive cost-effective service to the fresh produce industry in South Africa through:

- A quality assurance service on fresh produce
- A quality and advisory service for the trade
- Maintaining a grading, extension and training program
- Promoting food safety and hygiene
- A statistical information system with relevant information to producers and other stakeholders
- Solving the problems of producers, buyers, consumers, processors and packers
- Conveying a positive image of the fresh produce industry

VALUES

- Impartiality
- Integrity - internal (colleagues)
- External (clients)
- Professional conduct and expertise



CHAIRPERSON'S REPORT



RUDI HEINLEIN

CHAIRPERSON

It is a known fact that consumers worldwide are becoming increasingly finicky about what they eat with the emphasis on quality, food safety and traceability and South African consumers are no different. And if one looks at the Listeriosis debacle in South Africa and the disastrous consequences, the importance on inspections on all foodstuffs offered to the consumers are once again underlined. The aforementioned trend gave rise to an insistence worldwide that what is on the label must correspond with the content of the packaged product as well as that it is safe for consumption. Suppliers are consequently increasingly being pressurised to ensure that their produce landing on shop shelves have been inspected and meet the necessary food quality and safety standards. It is therefore rather frustrating that there are South African fresh produce industry role players who challenged the introduction of the official inspections and payment of the inspection fee in respect of the fruit and vegetables promulgated by the Minister of Agriculture, Forestry and Fisheries.

Prokon's aim to become a bigger player and better known in the quality assurance milieu has paid off as it has managed to increase its footprint in the local and overseas quality assurance environment during the 2017/2018 year under review. As a result of quality assurance becoming a permanent item on the agenda on all relevant platforms worldwide, especially in Europe, it is heartening to report that for the first time Prokon has been invited to attend a discussion on quality assurance in Europe – a discussion that is being attended by quality assurance bodies worldwide and which is further evidence of Prokon's growing foothold in the international quality assurance milieu. The main reason for the invitation is because of Prokon's increased importance as an inspection body, especially in terms of its added responsibility to conduct inspections on imported produce. As growing quantities of produce are coming from countries like Spain, Italy and France, it will afford Prokon the opportunity to discuss those matters that could influence trade agreements between South Africa and the countries of product origin.

In view of Prokon being assigned by the Department of Agriculture, Forestry and Fisheries (DAFF) it had commenced with the inspections in terms of the regulations on the regulated fruits and vegetables, notwithstanding the challenges faced in respect of the acceptance of the inspection service and the related fees. Conducting the inspections throughout South Africa offered the Prokon inspectorate the opportunity to get to know the produce and the different regulations and we are therefore now even better equipped to conduct the relevant inspections. Prokon has also contracted the Perishable Products Export Control Board (PPECB) as its official body to provide external training courses to the Prokon

inspectors to further equip them to render a quality inspection service. These courses were commenced with during the year under review and will be continued with in next financial year. The aforementioned training is in addition to the internal training provided continuously and the regular evaluation of inspectors.

Inspection services

As far as potatoes are concerned the greater scope of inspections ensured that inspections were conducted at more distribution and selling points which naturally meant better levelling of the playing field. In the past there were regular complaints that as potatoes were primarily inspected at fresh produce markets, the system were lopsided.

The training offered to inspectors and working with the other regulated products, as previously mentioned, ensured that Prokon were better equipped to conduct the inspections on fruits and vegetables, other than potatoes. The additional inspectors appointed also meant that inspections on these produce could be extended at fresh produce markets and distribution centres. The fact that we were better equipped was part of our success to sign contracts with the majority of retail groups regarding the scope of the inspection service and the payment of the inspection fee.

The contract Prokon has signed with FoodExperts – Europe is not limited to expansion in South Africa, but also the Southern African region. As a result Prokon will be conducting an investigation into the possibility to extend its services to neighbouring countries.

Finances

Financially 2017/ 2018 was a good year for Prokon. The company has managed to increase its earnings from the inspections and other commercial activities to R15 789 056, which is about 40% higher compared to the previous year. As a result we are glad to report that the company experienced a surplus of R1 891 931 in respect of the year under review compared to the nett loss R509 445 incurred in 2016/2017. However, it could have been much better if it was not for the slow implementation of the inspection service on all other vegetables and fruits for the reasons mentioned earlier. Further aspects that impacted on the income of the company are legal expenses incurred to collect inspection fees and cost incurred to appoint additional inspectors and acquire equipment to cope with the additional inspections conducted on the other fresh vegetables and fruits.

Conclusion

I have said it before, but wishes to reiterate the importance that producers should visit the fresh produce markets as part of their marketing activities. The market floor offers the producers the ideal opportunity to see how their produce perform on the markets, how their market agents operate and converse with buyers to obtain first hand feedback on the latter's opinion of the produce. Also regularly visit Prokon's website www.prokonsa.co.za for information on aspects that directly involve your product and the marketing thereof.

I wish to express my sincere appreciation to those fresh produce industry bodies and industries, retail businesses and importers for their positivity towards the introduction of the inspections on designated fruit and vegetables as well as paying the inspection fee and thereby made it possible for Prokon to execute its responsibilities in terms of its appointment as Ministerial assignee. At the same time I wish to request those role players and fresh produce industries that have not bought in as yet, to accept the inspections and thereby play their part to ensure that the consumer gets quality South African produced fresh fruit and vegetables for his money. In my opinion this will contribute in uplifting the image of the South African fresh produce industry as well as instilling greater consumer confidence in our produce.

As far as the Prokon Board of Director's is concerned I wish to congratulate Mr Jason Moonsamy on his appointment as a director and is looking forward to the fresh inputs he will bring to the activities of Prokon. My final word of thanks goes to the members of the Prokon board of directors for their cooperation and support that made it possible to take the decisions that benefitted the company, the personnel, the potato industry and other role players in the fresh produce.

Rudi Heinlein
Chairperson

CHIEF EXECUTIVE OFFICER'S REPORT



ETIENNE BOOYENS

CHIEF EXECUTIVE OFFICER

The business report on the activities of Prokon during the 2017/2018 financial year primarily focusses on the quality assurance service Prokon rendered to the potato industry in accordance with its appointment as assignee of the Department of Agriculture, Forestry and Fisheries (DAFF). However, due to its appointment as assignee of DAFF to ensure that all other vegetables and fruits, as promulgated in the government gazette, also comply with prescribed quality requirements, and other quality assurance related services the company renders under contract to local and foreign industry-related bodies, it is impossible not to make reference to these additional services in order to provide an overall picture of Prokon's role as a quality assurance service provider. The expansion of service naturally necessitated the expansion of personnel and equipment, but using the same resources to render services to a wider client base ensured a lower cost per industry client and optimum application. It is also important to take cognisance of the benefits the extended service holds as more produce are now subject to quality inspections, i.e. for the suppliers as they are assured that their produce comply with the official quality standards and also for the consumers who now know that they receive and pay for what is indicated on the packaging.

Prokon experienced a challenging, but nevertheless good business year based on the significant increase in inspections which had been conducted, especially that on other vegetables and fruits. This created the need for the appointment, training and strategic placement of additional inspectors and interns to accommodate the additional workload. To facilitate the inspection and information generating process, and in particular the national recording of inspection results per deliverer, the DiPar system was successfully installed on the cellular phones and tablets of inspectors operating on the four major markets. The system will be installed in all the other markets in the next financial year.

During the year under review Prokon extended the inspection of produce at retail outlets and also managed to enter into contracts with some retail groups to ensure that the inspections not only comply with Prokon's official mandate, but

also offer optimum added value to the retailers and consequently their clientele.

As far as inspections are concerned it made absolute business sense to combine the inspections on potatoes with that of the other vegetables and fruits as well as with the service rendering to other fresh produce industries and entities. With regard to inspections on potatoes no major hick-ups were experienced. What, however, warrants special mention is the finalisation of the upgraded colour plate book which will make it that much easier for role players, and especially the new inspectors, to identify defects in terms of the grading regulations. In respect of inspections on other vegetables and fruits Prokon continued to conduct the inspections notwithstanding the fact that some industries challenged the payment of the inspection fee.

Service delivery

Inspections

Prokon's contribution to the success of the potato industry should be measured in terms of the delivery of a quality assurance service with associated benefits for all role players in the potato value chain, as well as the supportive role it plays in solving problems and the provision industry-related statistics to facilitate production and marketing planning, and thereby optimising profitability in potato production.

During the year under review 41 039 potato consignments (99 020 993 bags) were inspected on fresh produce markets country-wide which represented an increase of 1.01% compared to the previous year. As far as downgrading are concerned the primary reasons were non-compliance with the official marking requirements and not indicating the correct cultivar on the bag.

To ensure that potato consignments delivered to e.g. distribution centres and shops are also inspected 4 230 inspections were conducted at distribution centres and shops, compared to 3 760 inspections during the previous year. This represents an increase of more than 18%. These inspections apply to potatoes as well as all other fruits and vegetables.

Prokon will in future also conduct inspections on imported fresh produce which will impact positively on the quality of produce offered to the consumer.

Commercial services

Prokon continued to conduct urgent once-off quality inspections on request and provided quality assurance related training to fresh produce industry role players. It also rendered quality-related services to individual fresh produce markets, independent retailers and importers which included quality assurance in respect of all fresh produce, the application of the official marking requirements, general hygiene on the market floor and writing-off of products of which the quality have deteriorated to such an extent that it is no longer suitable for human consumption.

In terms of the existing agreement the MRL sampling service rendered in South Africa and Namibia to FoodExperts, a European quality assurance company, has expanded during the year under review and all indications are that the service will expand even further in the next year.

Finance

Income was generated by rendering inspection services on potatoes as well as on all other designated fruits and vegetables in accordance with Prokon's appointment as assignee for both categories. Additional income was earned from the delivery of the so-called commercial



services provided to related bodies in the fresh produce environment. For the purpose of good financial management separate accounts have been created in respect of the income generated by the different business components.

Due to the extensive number of inspection points as well as different markets and retailers, debt collection remained a huge challenge for Prokon. On the positive side we have managed to reach agreements with some retail groups in respect of the service delivery content and the inspection fee. The nett surplus for the 2017/2018 financial year amounted to R1 891 931 compared to the nett loss of R509 445 of the previous financial year. The said surplus will primarily be invested in additional human resources and equipment.

With reference to the non-payment of inspection fees Prokon was forced to institute legal action against some non-payers and although reasonable success was achieved, the cost of instituting such action still had a significant negative impact on the income from inspections.

The company has received an unqualified audit report from Fourie + Botha, our external auditors, in respect of the financial year under review.

Personnel

As at 30 June 2018 Prokon had 82 employees of which 41 were inspectors who conduct inspections at national fresh produce markets, distribution centres and shops, as well as 30 assistants and six interns who assisted the inspectors in the execution of their duties. The remaining five personnel members provide the administrative support services, which is the ideal ratio for a service rendering institution.

Prokon is committed to affording young people who had completed their academic studies the opportunity to gain workplace experience. During the year under review the company accommodated six interns on some of the fresh produce markets to gain first-hand experience regarding quality assurance by being part of the inspection process. In addition to the exposure on markets these interns also accompanied the inspectors on visits to distribution centres and retail outlets to broaden their exposure to the quality assurance activities. Interns who show promise at the end of their internships are offered positions in Prokon's inspection division and at present approximately 80% of previous interns are employed.

Prokon Board of Directors

During the year under review Mr Johannes Tsotetsi, who represented the Union of Fresh Produce Markets of South Africa on the Prokon Board of Directors, resigned after serving on the Board since 2009. He has been replaced by Mr Jason Moonsamy from the Durban Fresh Produce Market.

Conclusion

I wish to extend my sincere appreciation to the Prokon Board of Directors who supported us in the company's all-encompassing quality assurance role as well as the personnel for their team effort to ensure that Prokon renders top quality services and grow as service provider to the fresh produce industry, locally and abroad. Lastly I wish to extend a special word of thanks to Mr Rudi Heinlein, Prokon's chairperson, and Mr Stanley de Lange, the company's Audit Committee chairperson, for their support and guidance throughout the 2017/2018 year under review.

Etienne Booyens
Chief Executive Officer



BUSINESS REPORT

The company

Product Control for Agriculture (Prokon) is a non-profit company under the Companies Act, No. 71 of 2008 that renders an inclusive quality assurance, product management and grading service to the South African fresh produce industry. The service is applicable to locally produced and imported fresh produce.

Good progress has been made with Prokon's accreditation as an inspection body under ISO 17020 with the South African National Accreditation Service (SANAS) and should be finalised in the next financial year. As soon as Prokon receives accreditation it will be internationally recognised as an inspection body whose inspections comply with international standards that are applied in 130 countries worldwide.

The board of directors



*Rudi Heinlein
Chairperson*



Stanley de Lange



*Dr. Simphiwe
Ngqangweni*



Human du Preez



Jason Moonsamy

The Prokon board of directors comprises of representatives representing relevant sectors in the fresh produce industry in order to ensure that all matters that impact on service delivery to the industry are addressed.

Mr Johannes Tsotetsi, who represented the Union of Fresh produce Markets of South Africa on the Prokon Board, has resigned and was replaced by Mr Jason Moonsamy from the Durban Fresh Produce Market.

In view of the extension of Prokon's service delivery, the current composition of the Board was reflected upon and attention will be afforded in the new financial year on representation on the Board by other fresh produce industry representatives.

The personnel

Prokon is duly aware of its responsibility to continuously deliver a professional quality assurance service to all stakeholders in the fresh produce supply chain. To fulfil its responsibilities as watchdog on locally produced and imported fresh produce the company has 82 personnel members in its employ of which 41 are suitably qualified quality controllers who render inspection services on fresh produce, 30 assistants who assist them in the execution of their duties, six interns and a further five staff members who constitute the management and administrative component. The increase in the number of quality controllers in Prokon's employ compared to the previous year under review, is a direct consequence of the company's appointment as assignee to also deliver an inspection service on all other fruits and vegetables.

The six interns mentioned above are persons who have completed their academic studies and were deployed on certain fresh produce markets to gain valuable workplace experience. Apart from being involved on the markets, they have also accompanied the inspectors on inspections at distribution centres and retail shops to further broaden their exposure towards quality assurance activities.

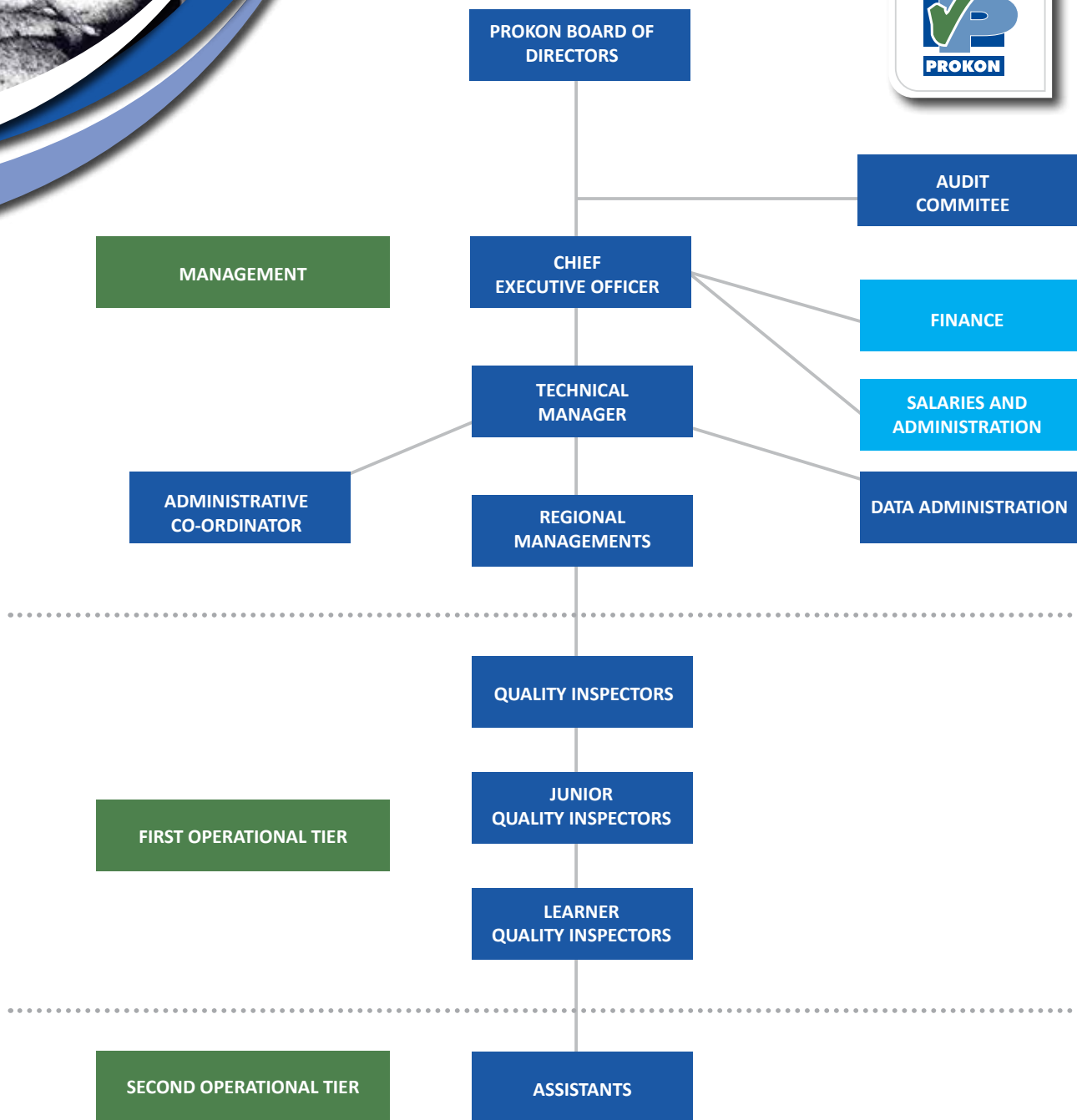


Figure 1: Prokon's company structure.

Service delivery

The services delivered by Prokon can be categorised as follows:

- Services rendered as assignee of the Department of Agriculture, Forestry and Fisheries in respect of potatoes.
- Services rendered as assignee of the Department of Agriculture, Forestry and Fisheries in respect of other fresh fruits and vegetables.
- Commercial services rendered to FoodExperts – Europe which is an international quality assurance company.
- Commercial services rendered to Potatoes South Africa.
- Commercial services rendered to other bodies in the fresh produce industry.
- Knowledge transfer.

As far as the inspection service is concerned, it is the responsibility of inspectors to ensure that the products comply with the standards as set out in the relevant regulations. Depending on the product attention is afforded to, inter alia, marking requirement, external and internal product quality, size as well as ripeness and firmness. These inspections are conducted at fresh produce markets, in the retail trade environment and at border posts and ports of entry.

Services rendered as assignee of the Department of Agriculture, Forestry and Fisheries in respect of potatoes

Prokon was officially appointed by the Department of Agriculture, Forestry and Fisheries in 1993 as assignee to enforce the regulations applicable to the grading, packing and marketing of potatoes destined for sale in South Africa, and to report back to the various role players. These regulations were promulgated under the Agricultural Products Standards Act, No. 119 of 1990.

In terms of its appointment Prokon renders a comprehensive inspection service on potatoes whereby the quality of the product is continuously controlled and feedback is provided to the producers in order to maintain the standard of this marketable product in accordance with the provisions set out in the regulations.

In 2017 Prokon was appointed by the Department of Agriculture, Forestry and Fisheries to also inspect all regulated fresh fruit and vegetables that are locally produced and imported and then sold.

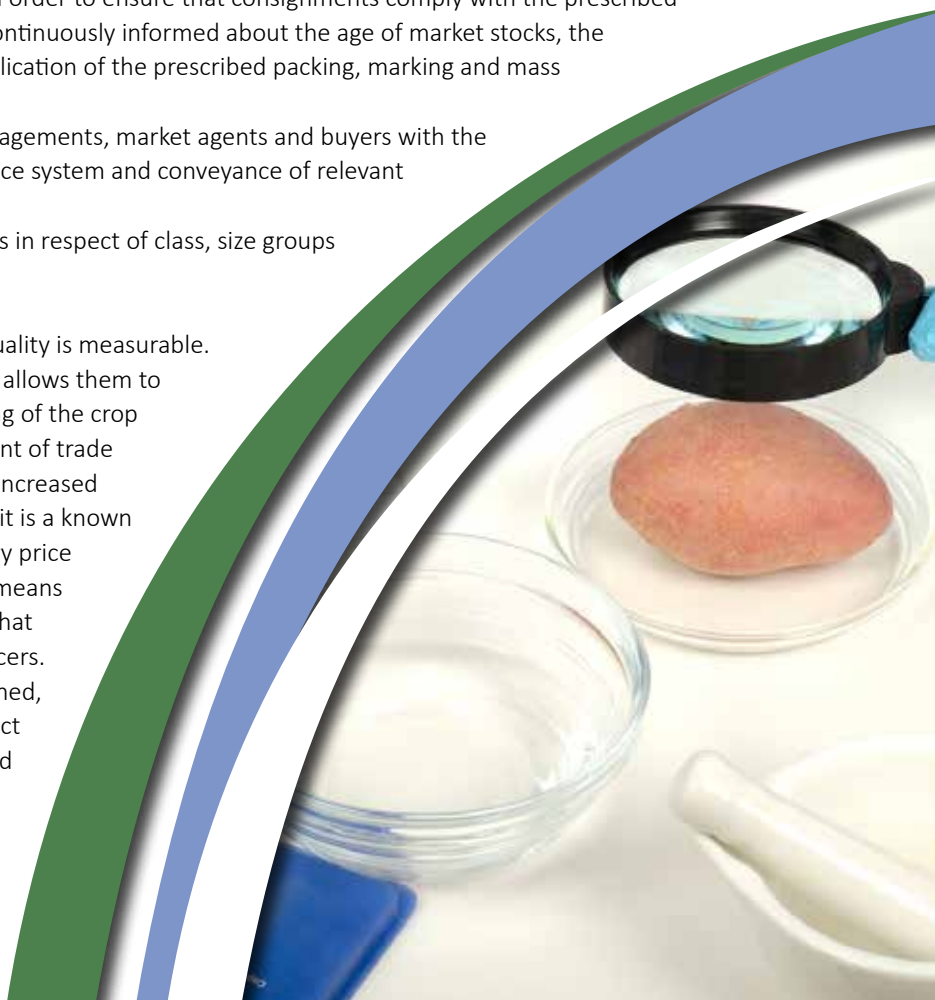
The company is also in the process to convert to the electronic recording of inspections that will allow for providing more detailed information to both producers and related industry organisations.

The above service is supported by a database that is continuously updated. Consequently, the latest information is confidentially made available to producers on a daily basis, as well as in a revised format to Potatoes South Africa which allows the latter to address problems identified on the market floor and in the trade.

During the year under review, Prokon rendered the following services to producers who delivered potatoes to the fresh produce markets and the trade:

- Personal communication with producers in order to ensure that consignments comply with the prescribed regulations at all times. Producers were continuously informed about the age of market stocks, the quality of the produce and the correct application of the prescribed packing, marking and mass requirements.
- Personal communication with market managements, market agents and buyers with the emphasis on managing the quality assurance system and conveyance of relevant information.
- Making available stock statistics on markets in respect of class, size groups and packaging sizes.

The service provided by Prokon ensures that quality is measurable. In the case of the potato producers the service allows them to optimally manage the production and marketing of the crop which indirectly contributes to the establishment of trade marks that represent quality, and inevitably to increased demand and return on investment. In addition it is a known fact that quality and stock levels are the primary price determiners on fresh produce markets, which means that the services rendered by Prokon just add that much more value to the products of the producers. As far as the buyers and consumers are concerned, the service ensures that they purchase a product that complies with prescribed requirements and they therefore receive what they pay for.



Advantages of Prokon's quality assurance system

The inspection service delivered by Prokon in accordance with its quality assurance system holds specific advantages for all role players in the fresh produce industry. Examples thereof are set out in the table below.

Advantages of the Prokon quality assurance system	
Role players	Advantages
Producers	<ul style="list-style-type: none"> • The quality of your produce is confirmed by an independent quality assurance company which means that it differentiates itself from other consignments in respect of quality and price. • Quality products fetch a premium price on the market floor and are normally sold first. • The content corresponds with the information on the packaging which instils consumer trust in your products. • It guarantees correct and reliable product information, e.g. class and price, and which is available to the producer in order to take informed business decisions. • Act on behalf of the producer as mediator in the event of disputes. • It reduces the risk of returns from buyers.
Fresh produce markets	<ul style="list-style-type: none"> • Creates a transparent and trustworthy trading platform for all clients in respect of quality.
Market agents	<ul style="list-style-type: none"> • Provides a technical support system between agents and producers. • Act as mediator in the event of disputes. • Can offer buyers products that comply with official standards.
Buyers	<ul style="list-style-type: none"> • Can purchase products with confidence. • Can deliver quality products to their clients.
Distribution centres, retailers and wholesalers	<ul style="list-style-type: none"> • Inspections are conducted by an independent quality assurance service provider. • Allows for evidence based decision making and communication. • Reduces cost. • Ensures consistent delivery of quality products. • Improves customer satisfaction. • Promotes position as preferred product provider. • Acts as mediator in the case of disputes.
Importers	<ul style="list-style-type: none"> • Creates transparency between role players in the case of quality disputes and claims.
Consumers	<ul style="list-style-type: none"> • Meets customer expectations and creates customer confidence and satisfaction.
Price	<ul style="list-style-type: none"> • Creates a true price discovery platform.



Prokon's head office is situated at the Tshwane Fresh Produce Market in Pretoria with regional offices on the following fresh produce markets:



- | | |
|--|---|
| 1. Tshwane Fresh Produce Market, Pretoria | 10. Nelspruit Fresh Produce Market, Mbombela |
| 2. Joburg Market, Johannesburg | 11. Sol Plaatje Fresh Produce Market, Kimberley |
| 3. Welkom Fresh Produce Market, Welkom | 12. Cape Town Market, Cape Town |
| 4. Vereeniging Fresh Produce Market, Vereeniging | 13. Matlosana Fresh Produce Market, Klerksdorp |
| 5. Mangaung Fresh Produce Market, Bloemfontein | 14. Springs Fresh Produce Market, Springs |
| 6. Uitenhage Fresh Produce Market, Uitenhage | 15. Durban Fresh Produce Market, Durban |
| 7. Port Elizabeth Fresh Produce Market, Port Elizabeth | 16. East London Fresh Produce Market, East London |
| 8. North End Fresh Produce Market, Port Elizabeth | 17. Pietermaritzburg Fresh Produce Market, Pietermaritzburg |
| 9. Mpumalanga Fresh Produce Market, Mbombela | |

Inspections on markets

During the year under review Prokon inspected 41 039 potato consignments which represent 99 020 993 bags on fresh produce markets country-wide. These consignments were received from producers in the 16 potato production regions and non-producing suppliers.

The majority of consignments received and inspected were of high quality. Only 7.88% of consignments delivered were down-marked to a lower class. Unfortunately some bags received still did not comply with the prescribed marking requirements, especially in respect of not indicating the cultivar and being under-mass.

Figure 2 indicates the number of bags delivered per region to all fresh produce markets during the 2016/2017 and 2017/2018 financial years.

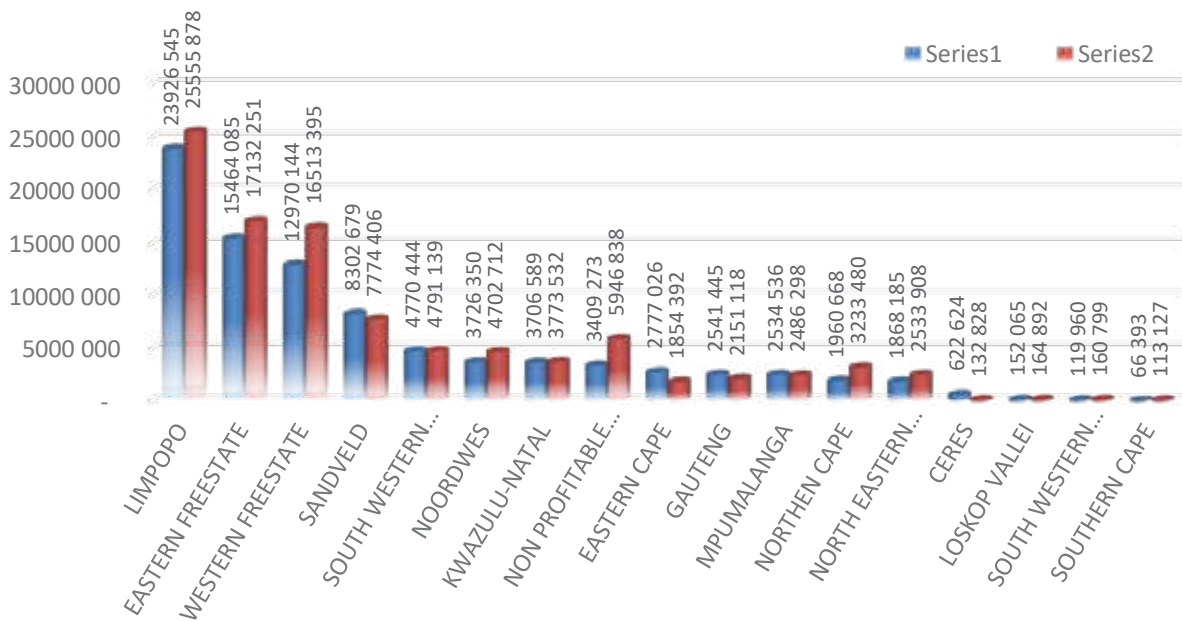


Figure 2: Number of bags delivered per region to all fresh produce markets during the 2016/2017 and 2017/2018 financial years.

Reasons for down-marking of consignments

Figures 3 and 4 reflect the reasons for the down-marking of consignments received from the 16 production regions and non-producing suppliers for 2016/2017 and 2018/2018, respectively.

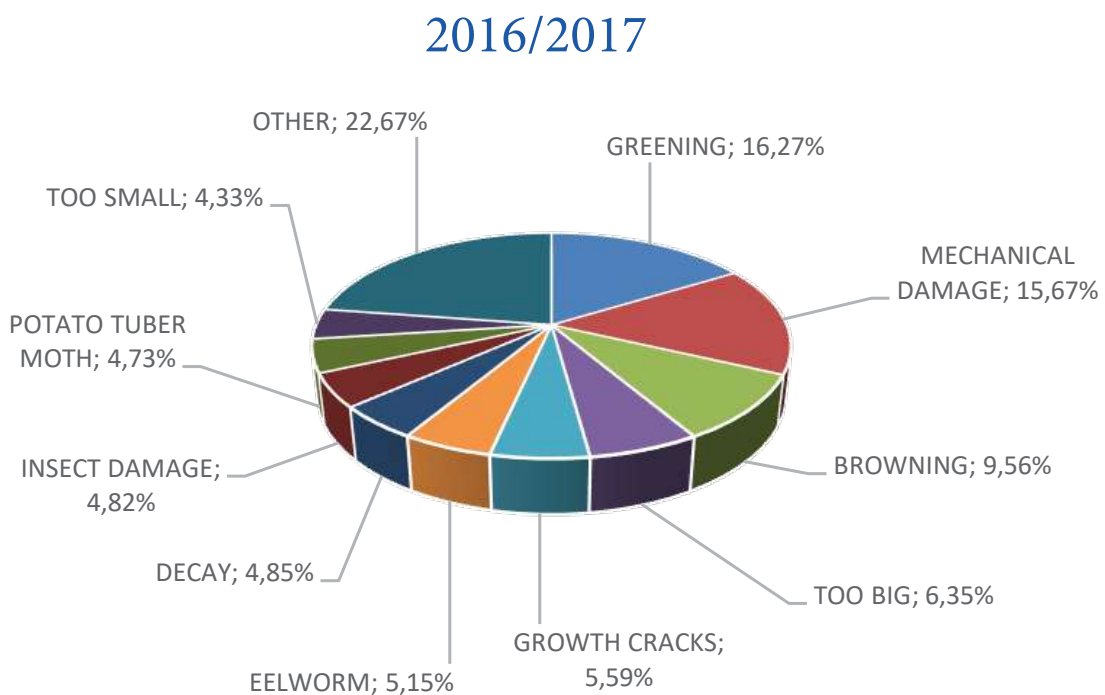


Figure 3: Reasons for down-marking on all markets – 2015/2016

2017/2018

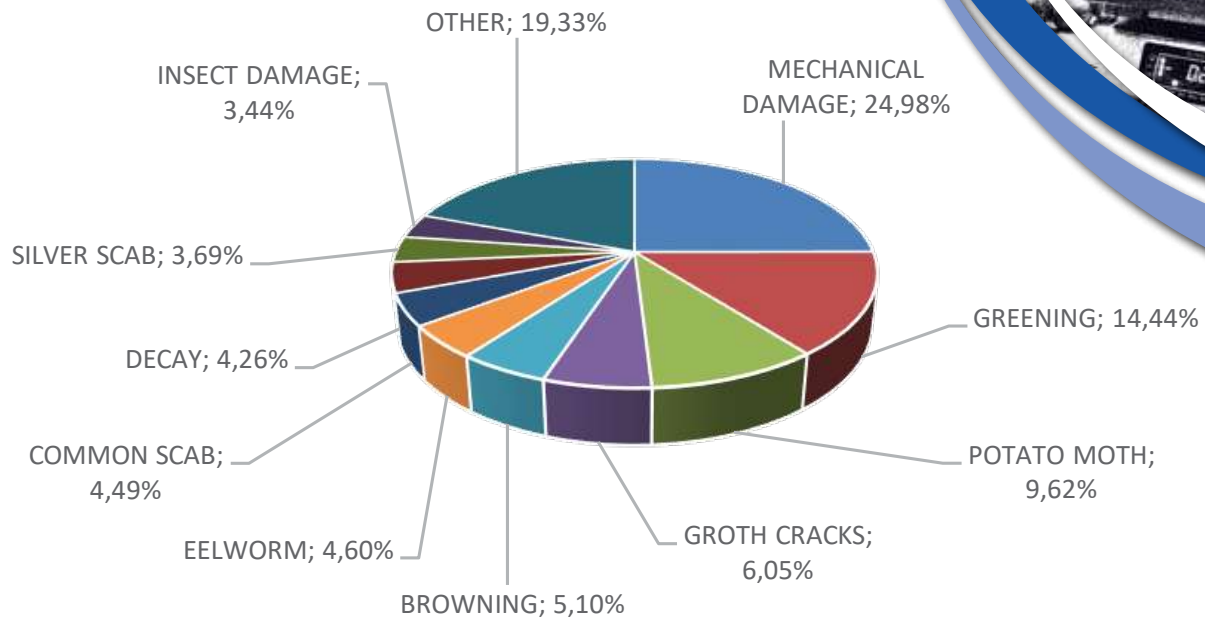


Figure 4: Reasons for down marking on all markets – 2016/2017

The main reasons for down marking per production region and non-producing suppliers in percentage are set out in Table 1.

Table 1: The three main reasons for down-marking

	Common scab	Mechanical damage	Greening	Browning	Eelworm	Enlarged lenticels	Growth cracks	Watergrass	Insect damage	Abraded	Potato tuber moth	Decay	Internal brown fleck	Size	Powdery scab	Other*	Total down markings
Sandveld		18,72		41,94						6,45						32,89	4,09
Ceres				60,05										9,73	12,33	17,89	10,2
South Western Cape				22,10	15,76			30,00								32,14	7,38
Northern Cape		15,67			21,51						10,48					52,34	12,17
Eastern Cape		22,58	25,87								14,65					36,90	7,54
Southern Cape																	0,00
North Eastern Cape		18,81	24,59						11,79							44,81	6,14
Western Free State		19,25	29,44								9,76					41,55	10,45
Eastern Free State		29,64			6,63						18,27					45,46	11,01
South Western Free State		21,57				13,08					12,96					52,39	5,21
KwaZulu-Natal		14,87	13,17												12,83	59,13	4,89
Mpumalanga	8,12	29,47										7,65				54,76	6,99
Limpopo		32,86	21,45				15,52									30,17	4,1
North West		23,86	24,38										9,16			42,60	6,77
Gauteng	12,6	26,02					10,28									51,10	11,65
Loskop Valley		47,41			13,29							19,29				20,01	16,97

* Other refers to reasons for down-marking other the three main reason indicated in the table.

Figure 5 indicates the cultivars delivered to fresh produce markets during the 2017/2018 financial year.

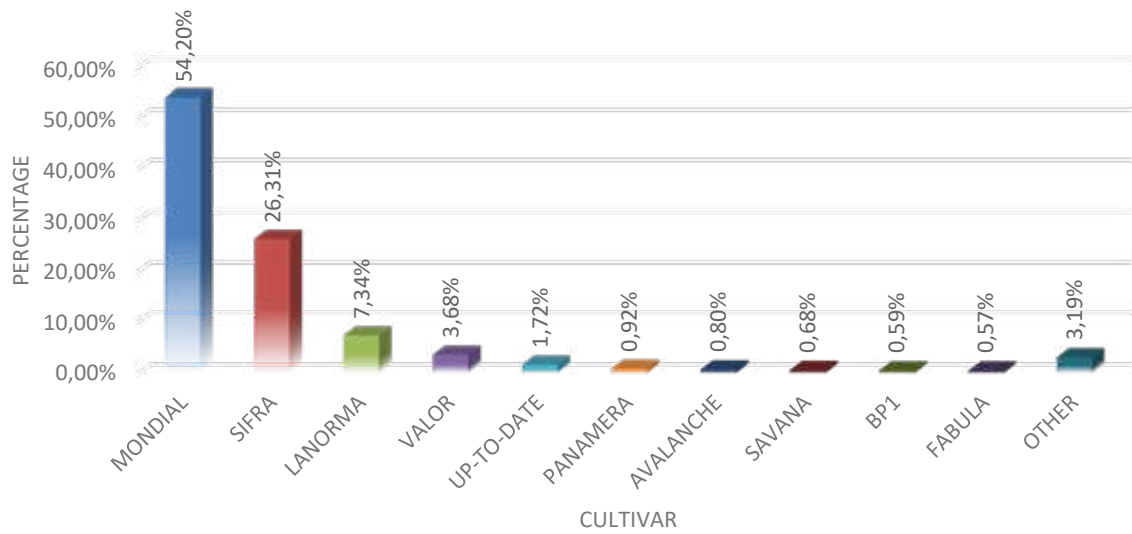
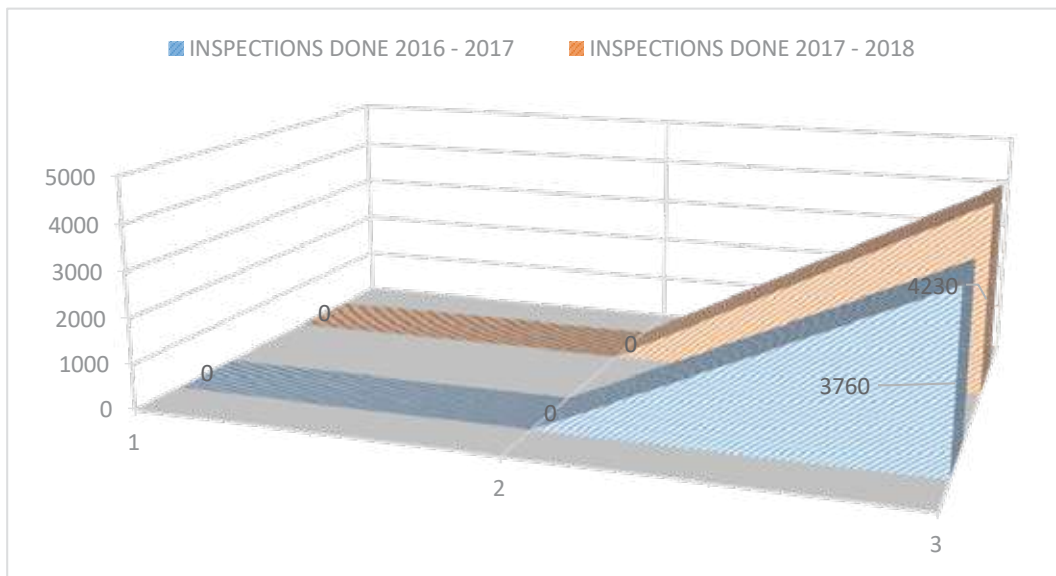


Figure 5: Ten main cultivars per region delivered to fresh produce markets during the 2017/2018 financial year. Other refers to all other cultivars delivered.

Inspections at distribution centres and retail outlets

Trade inspections on potatoes form part of Prokon’s responsibility as assignee of the Department of Agriculture, Forestry and Fisheries to ensure that as many as possible inspections are conducted at outlets in the distribution chain. During the year under review about 2 220 trade inspections on potatoes were conducted at distribution centres and nearly 2 110 at shops that are supplied by the relevant centres. During these inspections not only potatoes are inspected, but all other regulated fresh fruits and vegetables which makes the process and activities more cost effective for all parties.

The inspections conducted at distribution centres and shops are set out in Figure 6.



INSPECTIONS DONE 2016- 2017
 INSPECTIONS DONE 2017- 2018

Figure 6: Inspections conducted at distribution centres and shops during the 2016/2017 and 2017/2018 financial years.

In cases where the product did not comply with the prescribed marking and quality requirements, directives were issued and followed-up by further visits to ensure that the problems were rectified. The biggest problem experienced, was insufficient non-compliance with the marking requirements during re-packing, i.e. die cultivar name, size group and class were omitted nor was the country of origin indicated. In some cases the letter size on the packaging was also smaller than prescribed in the regulations. Reports were also sent to distribution centres to make them aware of the identified problems in order that they could implement corrective action.

Services rendered as assignee of the Department of Agriculture, Forestry and Fisheries in respect of regulated fruits and vegetables

In 2016 Prokon was appointed by the Department of Agriculture, Forestry and Fisheries as assignee to deliver an inspection service on regulated fruits and vegetables. This service does not include potatoes, and is merely referred to in the report to provide a complete picture of Prokon's service delivery to the fresh produce industry.

Commercial services rendered to Potatoes South Africa

Provision of information

The information on Prokon's database that relates to inspections on potatoes in the distribution channel was provided in processed format to Potatoes South Africa's Department: Industry Information on a regular basis. This information is regarded by the latter as essential to the optimal execution of its core business activities. The supplied information entails the volumes delivered to fresh produce markets per region, inclusive of different classes, size groups, cultivars, down-markings as well the reasons therefor and disease occurrence.

As part of the service, monthly reports on the volumes delivered by a specific region, accompanied by the reasons for and percentages of potato consignments down-marked, were sent directly to the organisation's regional managers. This allows the regional managers to discuss the problems that are unique to a specific producer with him/her and to recommend corrective action. However, the biggest advantage is that should the problem extends beyond a single producer, it offers the relevant regional management the opportunity to introduce overarching action to the benefit of the production region as a whole.

Commercial services rendered to other bodies in the fresh produce industry

Fresh produce markets

Quality assurance

Prokon rendered a quality assurance service to the fresh produce markets in Kimberley, Klerksdorp and Vereeniging. The service entailed quality assurance on all products and controlling marking requirements in accordance with the prescribed regulations. Attention was also afforded to general hygiene on the market floor as it contributes to a clean and thus suitable sales milieu for offering produce to the buyers. The relevant market authorities also received daily feedback together with recommendations on addressing the related problems.

Health services

An independent health service was provided to the fresh produce markets in Klerksdorp, Kimberley and Cape Town. The service entails the inspection and writing-off produce of which the quality had deteriorated to such an extent that it was no longer fit for human consumption. The removal of these products contributes to promoting the image of relevant markets and its agents as a preferred trading platform. The timely removal of such products also prevents other produce on the market floor from getting contaminated.

Fresh produce bodies

As a result of Prokon's appointment as assignee to conduct quality assurance inspections on all other fruits and vegetables, the services it rendered to other local fresh produce bodies under contract decreased drastically.

However, the company managed to expand its contract with FoodExperts – Europe for providing commercial services (MRL sampling) in South Africa and Namibia.

Liaison with role players in the fresh produce industry

Prokon places a high premium on liaison with the existing and potential clients, on the one hand to maintain its client base and on the other hand to extend it. Consequently numerous meetings were held with the key role players in the fresh produce industry to market the specialist services Prokon is able to provide. Meetings were also held with relevant government institutions in order to keep abreast of the latest developments and to ensure that Prokon's services comply with the official guidelines at all times.

Potato data base

The potato data base, next to the inspection service, is Prokon's biggest asset and therefore an important marketing tool. The information loaded onto the data base offers the user an excellent aid which is of primary importance in the production, harvesting and marketing of potatoes.

Information most in demand included:

- Number of bags delivered per market.
- Number of bags per size group and class delivered per market.
- Volumes delivered per region, as well as nationally to all markets.
- Cultivars and volumes delivered per region as well as nationally to individual markets.

Additional information that was made available included diseases and defects as well as statistics on down-markings and the relevant reasons.

The upgrading of the data base was also commenced with which also included the installation of new software to expand the database's user ability and to make it more accessible. The tracing of diseases and pests cannot be emphasised enough. This information were made available to potato researchers and the industry with a view to, inter alia, implement preventative and control measures. The value lies especially in tracing the source of the diseases and pests back to farm level.

Articles in CHIPS

Articles on potato deliveries per production region and by non-producing suppliers were published in every edition of the industry magazine, CHIPS.

Prokon website - www.prokonsa.co.za

As is the case with all companies, Prokon duly recognises that electronic liaison is imperative for image building and to convey information. Prokon's website which is continuously being updated to increase its user value as well as to make it more user friendly, offers the visitor a comprehensive overview of the activities of the company and the deliverable services. It also contains the latest official quality regulations applicable to potatoes and colour plates that depict the quality standards. The website also makes it possible for visitors to obtain information on the official regulations applicable to the most prominent fresh products.

Colour plate book

A revised colour plate book on quality specifications on potatoes were compiled in cooperation with Potatoes South Africa and other industry role players which will serve as an excellent aid to especially Prokon inspectors, potato producers and market agents. The book will be released in the next financial year.

