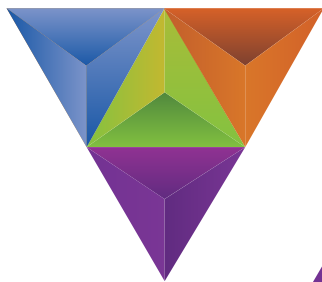
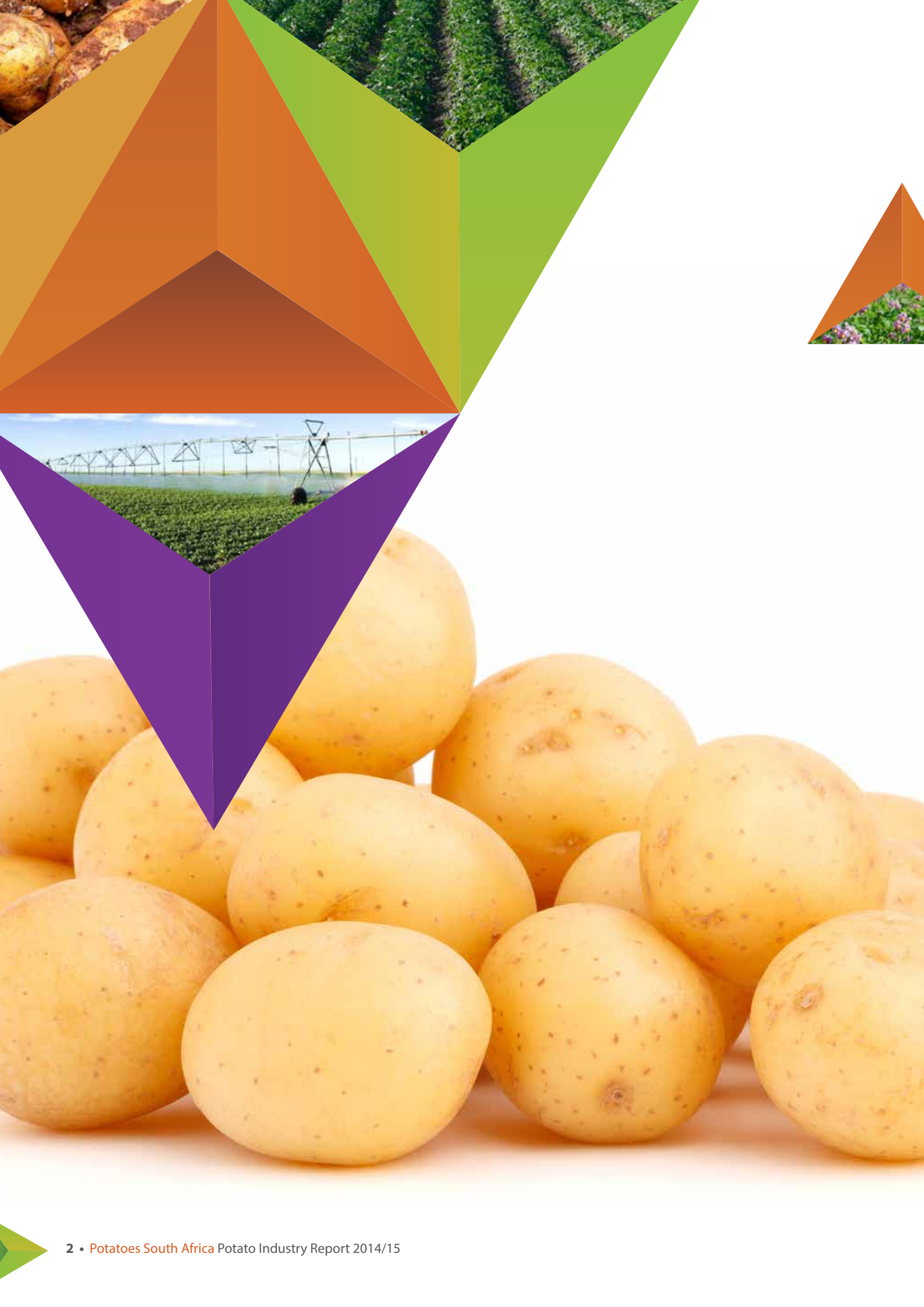


2014/2015 POTATO INDUSTRY REPORT





2014/2015

POTATO INDUSTRY REPORT



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POTATOES SOUTH AFRICA



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POTATO CERTIFICATION SERVICE



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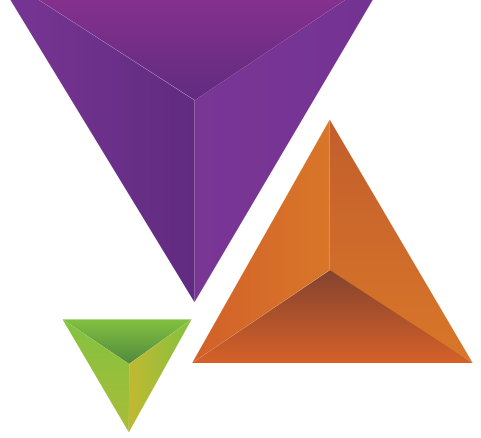




POTATOES SOUTH AFRICA

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IDENTITY

The identity of Potatoes South Africa 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 and 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 approximately 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 in the following way:

- Providing the industry with industry-strategic knowledge and management support.
 - Industry strategic research.
 - Industry strategic information (market information, production information, macro-economic information).
 - Knowledge transfer.
- To provide support services with regard to South Africa's potato consumption.
 - Market development support services.
 - Product promotion support services (e.g. consumer education, awareness creation, information sharing).
- To provide producer development support services.
 - Competency development (knowledge, skills, bursaries).
 - Technical support (best practice, advice, cultivar trials, as well as seed).
 - Industry structure maintenance support.





- To establish internal business excellence within Potatoes South Africa.
 - Business management and leadership through:
 - o Business planning.
 - o Corporate governance.
 - o Organisational cultural development.
 - o Business performance management.
 - o Relationship management/communication between role-players.
 - Resource management.
 - o Human resources management.
 - o Financial management.
 - o Secretariat.

VALUES

Potatoes South Africa pursues excellence in the following ways:

- Being proactive in taking initiative; being innovative, creative, solution-driven and adaptable, as well as by taking charge and ownership, pursue continuous learning and by being development-oriented.
- Demonstrating integrity by being accountable, transparent, honest, ethical, trustworthy and loyal.
- Being objective by acting rationally, analytically, neutrally, impartially and factually, as well as paying attention to detail.
- Providing service excellence by being responsive, willing, taking timeous action, being punctual, productive, accountable, efficient, professional, respectable, disciplined and by following organised business practices, as well as being accessible, diligent, motivated, committed, hardworking, passionate and enthusiastic.
- Engaging in partnerships via collaboration, participation, involvement and team work.



CHAIRPERSON'S REPORT

Potatoes is a serious role player in the South African economy in terms of its contribution to the gross domestic product. Taking the combined value of the field crop and horticultural sectors, potatoes is the fifth biggest agricultural sub-sector, and this when merely between 50 000 and 54 000 hectares are used for potato production (less than 1% of the available agricultural land). The primary industry is valued at R7 billion and the secondary industry at nearly R20 billion.

As far as job creation is concerned more than 50 000 workers are employed on farms alone. In terms of alleviating hunger and poverty the humble spud is a real stalwart – it is not only affordable and nutritious and consequently a must in any well-balanced diet, it also counters poverty by offering business opportunities. An example thereof is the informal traders and rural communities where potatoes offer them the opportunity to become self-supporting.

Soil was, is and will for long remain a political football and water has been thrown into the mix which creates even more uncertainty. This has definite implications in respect of investment in the potato industry as well as elsewhere in the agricultural sector, which unfortunately means that the ability to put food on the table of the consumer and provide jobs are playing second fiddle.

The South African potato industry is an extremely dynamic industry that is characterised by continuous



ERNST YZEL

CHAIRPERSON

change. The industry is currently in a cost squeeze as a result of increased real costs and exceptional low prices that can primarily be ascribed to the higher yields and more hectares planted. This led to more stocks on the market and exerted downward pressure on prices.

Unfortunately poor quality is a given that, with the abovementioned factors, is putting the sustainability of the potato industry in jeopardy. The above not only has implications

for the individual producer, but also for the regional economies where potatoes are produced, and naturally on national level as well. The reason for this is that potatoes play an important role given its high level of employment and therefore also as income generator for families which has a multiplier effect in rural economies. In addition potatoes is an affordable food source in regions where classes of potatoes other than class 1 can be purchased at lower



“Potatoes is an intensive crop to cultivate and it is so that a few farmers provide a lot of food and is a big asset for the country, and I do not think these farmers get the acknowledgement they deserve.”

This rather corresponds with Winston Churchill’s words on 20 August 1940 in his wartime speech to the British House of Commons - “Never was so much owed by so many to so few”

prices. I want to state categorically that these potatoes are still suitable for human consumption, and in most cases are down-graded because of appearance. Maybe it is time we launch an “ugly vegetable” campaign like they have done in some European countries to shake off the stigma that ugly is inferior.

As a result of the affordability of potatoes it will also have a positive impact on food security. Food security has a connection with the income of the worker earns on the farm which allows him to buy. As far as a balanced diet is concerned, especially in the rural areas,



potatoes have also established itself over time as a worthy alternative for other products in the staple food category.

It must be taken into account that the difficult market conditions are affecting the potato producer's sustainability and will have a ripple effect on the total potato value chain – input supplier, processor and fresh produce market. However, it will be the consumer who will bear the brunt because of lower volumes that will inevitably lead to higher prices if less potatoes are planted.

As far as the availability of potatoes

on the fresh produce markets are concerned it is a fact that more than 50% of potatoes on the market floor is bought by the informal trade for resale in the townships. It must therefore be accepted that in cases where products have staple food status, a shortage in such a foodstuff will have an economic effect that will spill over to a social impact that could have far reaching consequences on job creation, food security and poverty.

As in the rest of the world the number of potato producers are on the decline in South Africa. However, on the bright side the remaining producers are managing to produce more potatoes on basically the same hectares. This speaks volumes for their ability to produce potatoes under not so favourable production conditions. A perfect example is the ability of potato producers to harvest 100 ton per hectare under irrigation.

I have said this before, but I must repeat it in my report: *"Potatoes is an intensive crop to cultivate and it is so that a few farmers provide a lot of food and is a big asset for the country, and I do not think these farmers get the acknowledgement they deserve."* This rather corresponds with Winston Churchill's words on 20 August 1940 in his wartime speech to the British House of Commons - *"Never was so much owed by so many to so few"*.

The economy of scale is becoming increasingly important, especially in respect of potatoes because it is so expensive to produce and because it is becoming more and more expensive to establish a hectare of potatoes. This means that the potato

industry will have to become that much more professional, and here we are looking at aspects such as optimal application of resources, optimal production and marketing practices, top quality products and finally optimal usage of the value chain. It is imperative that the potato producer become a full-fledged participant in the value chain and must take ownership of his product. The potato industry will also have to seriously think about value-adding. If it is possible in the rest of the world, why not in South Africa – and now I am not talking about what we are familiar with such as crisps, French fries, baked potatoes and mash. The sustainability and viability of the potato industry are in our hands and we shall have to think innovatively about alternative uses for potatoes, and specifically potatoes that are not classified as class 1.

It is a well-worn stock phrase, but it remains an accomplished fact – a potato farmer is no longer just a farmer and a potato farming enterprise is no longer just a farming enterprise. The potato farmer is a businessman and the potato farming enterprise is a full-fledged agri-business that has to be managed as such.

My thanks go to the producers who are squarely behind Potatoes South Africa – thank you for your support. And then to the board members for your unselfish willingness to serve the potato industry and lastly to the personnel of Potatoes South Africa for your hard work. Together we make this industry special.

Ernst Yzel
Chairperson



CHIEF EXECUTIVE OFFICER REPORT



ANDRE JOOSTE

CHIEF EXECUTIVE OFFICER

The 2014/15 year under review was characterised by the implementation of the strategic plans of the core businesses which were compiled during the previous year under review and which are aligned to Potatoes South Africa's overarching strategic plan. What makes the year so unique is the fact that it teemed

with new and dynamic perspectives and actions that completely changed the way things were done in the organisation, and that without fiddling with those that have been working well over time. This new way of doing things also included improved communication. The emphasis was especially on the use

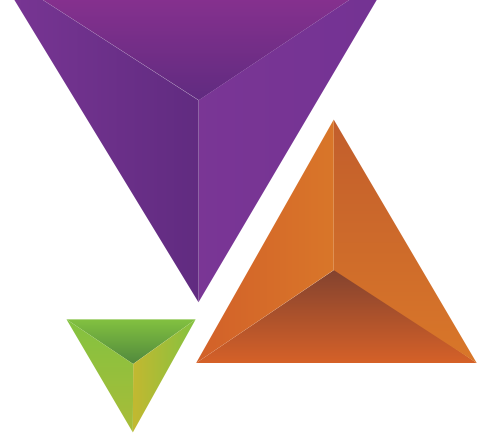
of modern communication channels to get information that, for example, is associated with the activities of and information about the organisation and its core businesses, into the target domain as soon as possible.

If taking into account the limited funds at its disposal, Potatoes South Africa managed exemplary to attain its core business goals, and the optimal application of such funds and the successes achieved can only be ascribed to proper planning based on relevant research.

Full reports on the core business activities forms part of the Potatoes South Africa core business reports, but I deem it necessary to highlight some of these actions.

Communication

Because Potatoes South Africa realises the importance of keeping abreast with the latest trends in liaison and conveying information, it was decided to develop and employ the website (www.potatoew.co.za) to its full potential. As a result approval was obtained for the development and implementation of a website based client relationship management mechanism to be able to communicate fast and efficiently with the potato producer as primary client. This will mean that the information, or better put, business intelligence that is generated by Potatoes South Africa



to assist producers to run the farming businesses successfully, is as close as the click of a button. For example, all technical publications and the technical articles that are published in CHIPS are now also available on the website. This means that those people who have embraced the cyber world, can now read CHIPS electronically on the website.

The newly launched electronic newsletter has been well received by the industry. The purpose of the newsletter is to bring “fresh” and important news to the attention of readers as quickly as possible. What is published in the newsletter is meant to tickle the interest and should the reader wish to know more, he can read the whole story by way of a link.

Market Development and Product Promotion

The consumer is bombarded with product information on a daily basis and it is therefore necessary for any industry to ensure that his message is conveyed in such a manner that (1) the consumer receives and understands the message amidst all the information clutter, and (2) purchase the product. To manage this Potatoes South Africa’s consumer education campaign was preceded by an independent consumer research study.

As far as the promotional campaign is concerned it was launched using

the slogan – *Don’t just see the potato **SEE THE POTENTIAL*** with the emphasis on a balanced combination of activities to reach as many target market consumers as possible. Examples thereof are:

- A public relations program focussing on conveying information to the consumer by, for example, emphasising the nutritional value and value for money proposition of the potato.
- A dual approach sales promotion aimed at (1) the consumer purchasing his/her potatoes from a formal trader, and (2) the consumer supporting the informal trader.
- A radio campaign to support the informal trade campaign.
- Rural marketing which is a first for Potatoes South Africa. The thrust behind the campaign is to make the potato the heart of any dish in the rural areas as well.
- Direct marketing with the emphasis on making use of the electronic media (Facebook, Twitter, Instagram and YouTube) to communicate with the consumer.
- Publishing advertorials in popular magazines and papers.

Under *Project Rebirth* the code for best practices was finalised and made available to the industry. Potatoes South Africa has been made part of the process to ensure the successful implementation thereof on the fresh produce markets.

Research and development

One of the outcomes of the survey conducted amongst potato producers on unique research needs at regional level, is the launching of two publications in Afrikaans and English, namely *Post harvest rotting of potatoes* and *Best practices for the handling of seed potatoes*. These publications are typical of Potatoes South Africa’s focus on technology transfer as part of its enlarged emphasis on communication activities to the benefit of the industry.

A further aspect that deserves mentioning is the different projects that are aimed at managing potatoes’ footprint in respect of resource usage as efficiently as possible, taking into account the industry’s key role as a food provider.

Industry information service

Potatoes South Africa is duly aware that market intelligence is the backbone of decision making and as a result a continuous effort is being made to align the information sources and the array of information with the needs of the industry. As a result all workable and available communication channels are employed to convey market intelligence as soon as possible. Some of the channels used are the cell phone SMS’s, the newsletter and the website.



“Because Potatoes South Africa realises the importance of keeping abreast with the latest trends in liaison and conveying information, it was decided to develop and employ the website (www.potatoew.co.za) to its full potential. As a result approval was obtained for the development and implementation of a website based client relations management mechanism to be able to communicate fast and efficiently with the potato producer as primary client.”



During the year under review increased focus was placed on providing information to the potato producer to facilitate decision making. Examples are the labour versus mechanisation analysis, the pack-store costs survey and the investigation on labour and labour effectivity.

Transformation

The success of transformation in the potato industry will, inter alia, be measured by the successful establishment of black potato farmers. As a result Potatoes South Africa has taken the strategic decision to extend its support to those farmers in its business development program who show potential to make a success of their potato farming business. This is in addition to extending the number of farmers in the relevant program.

In respect of Potatoes South Africa's small grower development program the support of community projects in partnership with the provincial agricultural departments was continued with. The emphasis of the program is on food security and poverty alleviation, especially in KwaZulu-Natal and the Eastern Cape.

To enlarge the potato industry's pool of knowledge the number of bursaries that are made available for agricultural diploma, undergraduate and post graduate studies, have been increased. As it was decided to also make bursaries available for other fields of study, provision has been made in the market development and product promotion budget for the allocation of such a bursary.

Other matters that warrant mentioning

Protective measures to combat the importation of frozen French fries

It is a known fact that the importation of frozen French fries holds nothing good for the South African potato producers and processors. Potatoes South Africa, McCain Foods, Lamberts Bay Foods and Natures Garden worked closely together in an effort to ensure the implementation of a safe guard measure against the importation of cheap frozen French fries. In respect of 2014/15 a safe guard measure of 40.92% applied for the period 5 July 2014 to 4 July 2015. For the period 5 July 2015 to 4 July 2016 the safe guard measure will be 20.45% where after an anti-dumping tariff shall apply for a period of five years. The anti-dumping tariff specifically applies to imports from the Netherlands and Belgium.

Unfortunately, notwithstanding the above measures, frozen French fries still enter the country. This is ascribable to the low European producer prices due to a massive European potato crop and the mutual sanctions between the European Union and Russia (the latter is an important buyer of potatoes and potato products produced in European Union member countries). However, it must be accepted that the situation could have been much worse if no protective measures were in place.

Proposed withdrawal of zero rate VAT

In response to the potentially

negative impact that the Minister of Finance's proposed withdrawal of the zero rate VAT on agricultural inputs could have on the agricultural sector, Potatoes South Africa has been successful in opposing the withdrawal by joining forces with other agricultural industry interest groups. In presentations and memorandums to the South African Revenue Service, the Treasury and Parliamentary Advisory Committee on Finance and during attending public hearings, the impact of the proposed withdrawal on food security, job creation, foreign exchange earnings and agriculture's pivotal role as cornerstone of the South African rural areas, was explained.

It was consequently decided that the status quo will apply for now, i.e. the zero rate VAT on the abovementioned products remains unchanged.

Potatoes South Africa still works closely together with the National Agricultural Marketing Council to conduct a comprehensive impact study on the matter.

Potato packaging and paper specifications

The decision by the Department of Agriculture, Forestry and Fisheries to scrap the paper specification applicable to the manufacturing of potato bags from the official regulations, led to an increase in potato bag breakages because of inferior quality paper being used by some bag manufacturers. This compelled Potatoes South Africa to contract Prokon to undertake a survey to determine paper specifications for the manufacturing of potato bags. These voluntary specifications came into effect on 1 January 2015. The

majority of bag manufacturers and paper importers signed the code of conduct in terms of which the bags manufactured by them would comply with the guideline specifications. Producers, therefore, should preferably use bags that comply with the guideline specifications. Potatoes South Africa also recommends that producers should urge their bag manufacturers to include the logo on their bags as it indicates that the paper used for the manufacturing of bags, does comply with the guideline specifications.

Application for statutory measures

Potatoes South Africa's application for statutory measures for a further four year term, which has been approved by the Minister of Agriculture, Forestry and Fisheries, was promulgated in the Government Gazette on 12 June 2015. The measures, which come into operation on 1 July 2015 and will apply until 30 June 2019, regulate the registration of all industry role players, record keeping and the submission of returns and the determination of guideline prices and levies on potatoes. The commencement date of the measures now coincides with Potatoes South Africa's financial year which will facilitate the implementation and management thereof, with special emphasis on the appropriation of the statutory funds collected by way of the levies.

This is the first time that Potatoes South Africa's application for statutory measures has been approved in time and which can be ascribed to the timely submission of the application and close and regular liaison with the National Agricultural Marketing Council.

Potatoes South Africa has also been appointed as administrator for the management of the statutory measures in respect of the 2015/19 statutory term.

The statutory measures can be viewed on Potatoes South Africa's website, www.potatoes.co.za.

Symposiums

Potatoes South Africa's three symposiums, i.e. the Potato Research Symposium, the Transformation Symposium and the Marketing Symposium rightly deserve their place on the potato calendar. The three symposiums are the ideal platform, for example, to convey and exchange information, for taking decisions and for interacting on professional and social level. It is also growing in stature if the program content, the level of decision making and the number of people attending are taken into account. During the year under review the Marketing Symposium was part of the PMA Fresh Connections – South Africa Conference and exhibition at which a presentation on the *Informal trade in South Africa and the opportunities it offers* was made. Ms Immaculate Zinde presented on the *Opportunities presented by the informal business networks*.

Potatoes South Africa is revered

The good work Potatoes South Africa is doing in the interest of the fresh produce industry has not gone unnoticed by other industry role players. The Institute for Market Agents of SA (IMASA) presented Potatoes South Africa with its prestigious *Shiny Red Apple Award* at their 2014 congress. It was awarded in recognition of the

work being done by Potatoes South Africa in the interest of the total fresh produce industry, and in particular for its direct involvement with *Project Rebirth* that is aimed at ensuring that fresh produce markets will continue to play a prominent role in the trading of fresh produce.

Personnel

During the year under review the following personnel changes took place

- Ms Santa Bronkhorst was appointed on 1 July 2014 to fill the newly created half day regional secretary position at Bethlehem. At the Human Resource Committee meeting held on 26 May 2015 it was decided to convert it to a full day position to provide more extensive support to Mr Attie van den Berg who is also responsible for the co-ordination of regional services country wide.
- Ms Monique van der Merwe has re-joined Potatoes South Africa as financial clerk on 29 September 2014. This followed the resignation of Ms Francia Wait on 29 August 2014.
- Two of Potatoes South Africa's regional managers, Mr Daniël Möller and Mr Jaco Botes left the service on 31 October 2014 and 30 June 2015 respectively. The board decided to convert one of these positions into that of an information management specialist. The second regional manager's position was not filled by the end of the year under review.
- Ms Louise Swart has been appointed to the position of information management specialist and will commence

duties on 1 July 2015.

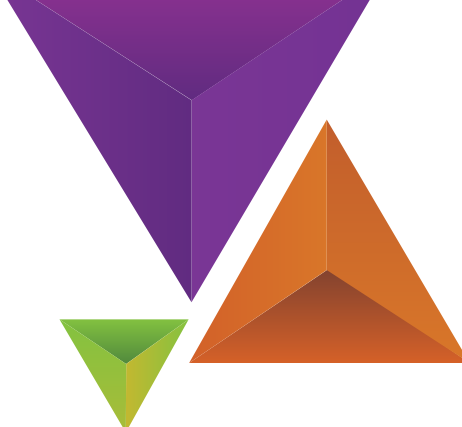
- Ms Tebogo Thobelo resigned as receptionist / telephonist with effect from 13 March 2015.
- Ms Zodwa Mnisi who filled the position of receptionist / telephonist in a temporary capacity, was formally appointed on 11 May 2015.
- Ms Elray Stuurman resigned on 21 November 2014 as transformation assistant.
- Ms Thando Ndlovu was appointed to the position on 9 February 2015, but she resigned on 31 March 2015.
- A suitable replacement was found in the person of Ms Audrey Masombuka. She will assume duties 3 August 2015.

Finance

Potatoes South Africa's income for the 2014/15 financial year comprised statutory funds made available by the *Potato Industry Development Trust* as well as income from own reserves. The completion of the 2014/15 financial year also coincided with the final year of the second statutory period. As mentioned earlier the fact that the statutory year now also commences on 1 July, as is the case with Potatoes South Africa's financial year, will facilitate more efficient financial record keeping.

Statutory income and expenditure

In respect of the 2014/15 financial year Potatoes South Africa collected statutory levies to the amount of R38 203 447 on behalf of the *Potato Industry Development Trust*. R266 411 interest was earned on investments. The agreement signed with the packaging manufacturers to collect the levies still applied for



the 2014/15 financial year which simplified and streamlined the process. As a result Potatoes South Africa managed to collect close to 98% of all levies invoiced by the packaging manufacturers.

With regard to the remaining levies, it was collected directly by invoicing:

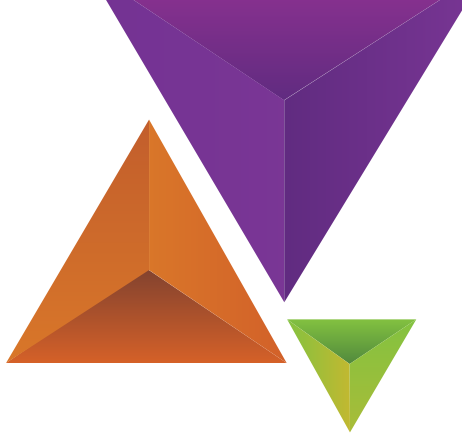
- Seed potato growers in respect of certified seed potatoes.
- Processors and traders in respect of bulk purchases.
- Importers in respect of imported processed potato products.

In respect of the above almost 100% of the payable levies were collected.

Irrecoverable levies can primarily be ascribed to bankruptcies.

The 2014/15 budget, as approved by the *Potato Industry Development Trust*, amounted to R44 039 254 of which R42 500 129 were appropriated. The underspending of R1 539 125 (3.5%) can primarily be ascribed to savings in personnel expenses, travel and accommodation costs, administrative expenses and communication. The underspending on projects was a mere 1.3%. The unappropriated funds amounting to R4 222 700, was transferred from the Trust's carry over capital account and utilised.

The capital in the carry over account of the *Potato Industry Development Trust* amounted to R7 581 795 and will be transferred to the 2015/16 financial year in terms of ministerial approval obtained. The monies will be used to contribute to the continuity



of long term projects. A portion thereof forms part of the approved budget for 2015/16.

Statutory spending for the period under review was in compliance with the following approved ministerial guidelines:

- At least 20% for the Transformation core business (of the 20% funding appropriated to transformation, 50% will be used for enterprise development [inclusive of emerging commercial and small grower development], 20% towards training and capacity building of students, interns, etc. and 30% towards management and support services by Potatoes South Africa to the transformation program [inclusive of salaries of staff employed in the transformation core function and other directly related operational expenses]).
- Approximately 70% for the other core businesses, i.e. Research and Development, Industry Information

and Market Development and Product Promotion.

- Not more than 10% for the administration of the statutory measures.

As set out in Table 1 Potatoes South Africa comfortably managed to comply with the guidelines set by the Minister of Agriculture, Forestry and Fisheries, the guidelines set by the National Agricultural Marketing Council in respect of the allocation of funds for transformation and the Potatoes South Africa Congress decision that equal funds should be spent on the two core businesses, Research and Development and Market Development and Generic Product Promotion. Congress also decided on a fixed ratio of 60:40 between projects and operational costs.

Income from own reserves

Potatoes South Africa's (Voluntary) own funds were mainly supplemented by means of:

- Return on investments - R464 544
- Property and capital assets rental - R506 087

General expenses comprised administrative costs and devaluations.

Additional funds received included the R467 851 generated from

hosting the Potato Research Symposium. The symposium was partly financed from existing reserves and additional income generated during the year under review, which amounted to R179 920.

Total funds and reserves amounted to R10 230 603. Properties and moveable assets, based on book value, amounted to R711 616 and investments and loans to R8 812 074.

Financial position

I am proud to say that the financial position of Potatoes South is still healthy to the core. The Potato Industry Development Trust accepted the audit reports by KPMG. Fourie + Botha issued an unqualified report in respect Potatoes South Africa (Voluntary). The comments contained in all three the reports were administrative in nature and the necessary amendments have already been effected.

Potatoes South Africa has been retained by the Potato Industry Development Trust as administrator to manage the statutory measures which includes the collection and management of the statutory levies. As part of its managerial responsibilities Potatoes South Africa is also responsible for the implementation and management of the core business projects accepted

Table 1

Category	Amount (R)	Percentage (%)
Research and development	R 11 497 001	27.1%
Industry information	R 1 904 649	4.5%
Market development and product promotion	R 11 705 995	27.5%
Transformation	R 9 056 651	21.3%
Industry services	R 4 989 092	11.7%
Administration	R 3 346 741	7.9%

Table 2

Meetings	Number
Directorates	
Potatoes South Africa	3
Potato House	2
Potatoes South Africa committees	
Management Committee	1
Marketing Committee	3
Information Committee	3
Research Committee	3
Transformation Committee	3
Audit Committee	3
Human Resources Committee	3
Potato Industry Development Trust and committee	
Trust	3
Risk and Audit Committee	3
Technical Research Advisory Committee	3
Bursary Committee	2
Forums	
Potato Industry Forum	2
Seed Potato Growers' Forum **	1
Seed Potato Traders Forum	1
Potatoes South Africa symposiums	
Potato Research Symposium	1
Marketing Symposium	1
Other	
Potato Industry Forum Steering Committee	2
Induction programs	
Bursary Students Induction Program	1
Developing Farmers Induction Program	1

by Potatoes South Africa's board of directors and approved by the Potato Industry Development Trust. In respect of administrative services rendered, Potatoes South Africa received an administrative fee equal to 7.87% of levy funds appropriated, which is significantly less than the 10% approved by the minister.

Secretarial services

Potatoes South Africa has a proper industry focussed committee / forum system in place that ensures that the

inputs and interests of all industry role players are reflected in the decision making process. The meetings that took place during the year under review are listed in Table 2.

Conclusion

Thank you potato producers, members of the Potatoes South Africa board, committee and forum members, the members of the Potato Industry Development Trust and industry role players for your support to convert the challenges facing the

organisation and the industry into success stories.

A special word of thanks to the personnel of Potatoes South who are the engine room of the organisation that makes things happen. And lastly, thank you Mr Ernst Yzel for being there when wisdom and support were needed.

Dr André Jooste
Chief Executive Officer



BUSINESS REPORT

STRUCTURE

Potatoes South Africa 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. It operates as an organisation with an integrated structure that comprises a network of industry-orientated forums and committees on which participating role-players and individuals have a seat. This structure ensures that the organisation executes its mandate to render a comprehensive service to the potato industry as a whole.

All potato producers can be members of Potatoes South Africa. On 30 June 2015, 561 active producers were registered.

FINANCING

The activities of Potatoes South Africa are funded by a statutory levy on potatoes, held in the Potato Industry Development Trust. As the appointed administrator, Potatoes South Africa collects the levy on behalf of the Trust and applies to the Trust 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).
- Approximately 20% for the delivery of the transformation function.
- Not more than 10% for the delivery of the administrative function.

Potatoes South Africa also has own funds 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 Potatoes South Africa.

BOARD OF DIRECTORS

The Potatoes South Africa 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. As at 30 June 2015, the board of directors was constituted as shown in Table 1.

In accordance with the company's Articles of Association, the chairperson of the Audit Committee shall be a non-executive, non-aligned, suitably qualified person.

During the period under review, Mr J H du Plessis from the chartered accountants firm, Geyser and Du Plessis, served as chairperson of this committee.

The following changes in the composition of the Board took place during the period under review:

- Mr J F (JF) van der Merwe replaced Mr G L (Garnet) Leonard as representative of the Western Free State production region.
- Mr P L (Pietie) Ferreira replaced Mr C F (Chris) Potgieter as representative of the Eastern Cape production region.

FORUMS AND COMMITTEES

Potatoes South Africa ensures representation across the potatoes supply chain by way of representation on industry-aligned forums and committees. This structure provides a platform for debate, discussion and decision-making, where all stakeholders can be heard. These forums and committees include the following:

Committees

- Management Committee
- Information Committee
- Research and Development Committee
- Marketing Committee
- Transformation Committee
- National Seed Potato Committee
- Processing Producers Committee
- Potato Industry Forum Steering Committee

Table 1: Board of directors

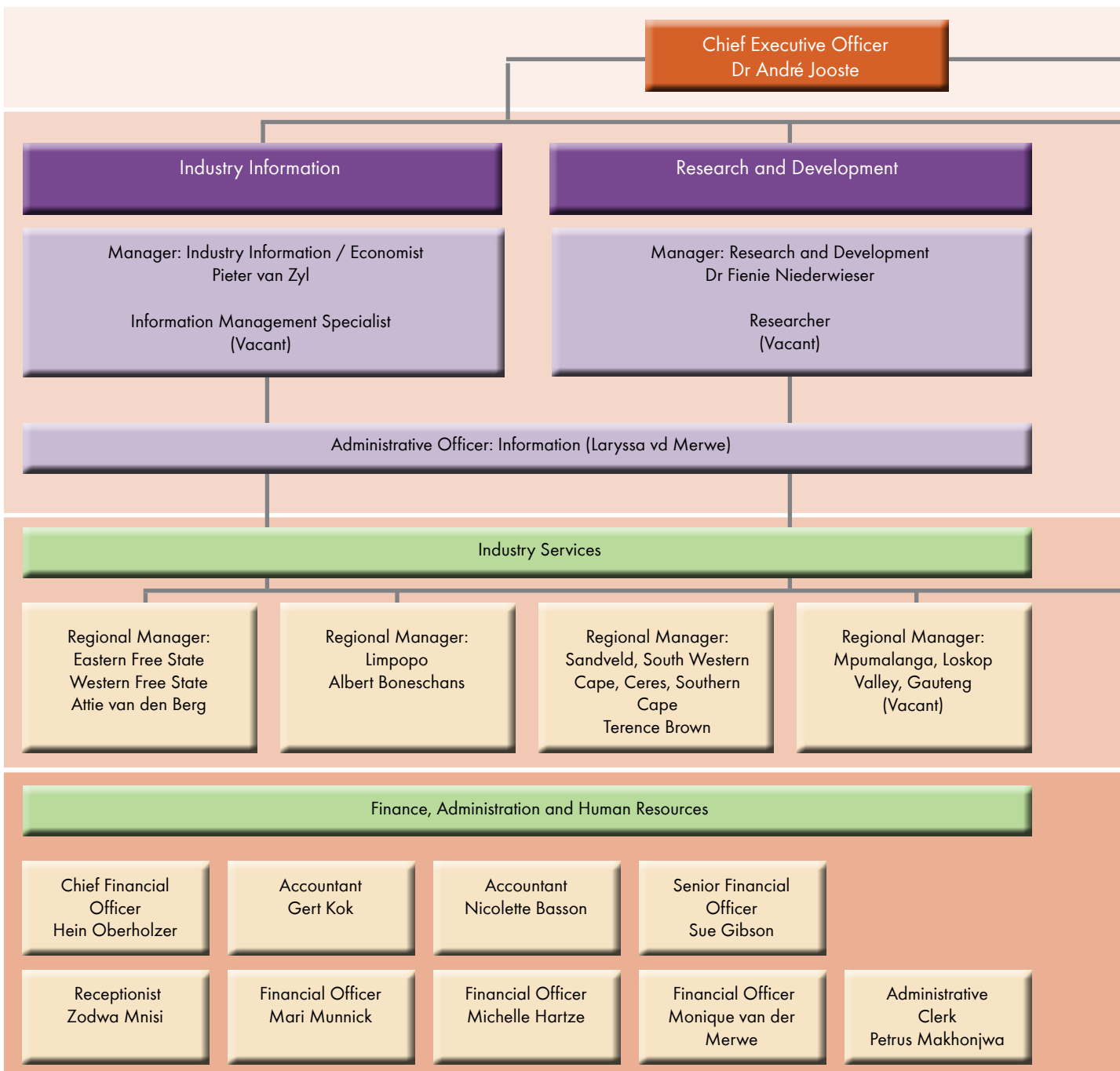
Director	Position	Representation
Mr G E (Ernst) Yzel	Chairperson	Independent / Non-aligned
Mr B S (Bernhardt) du Toit	Vice Chairperson	Ceres
Mr J A (Johan) van Zyl	Director	Eastern Free State
Mr J VdS (Spuy) Botes	Director	Northern Cape
Mr L A (Leon) Cass	Director	Mpumalanga / Gauteng
Mr J P J (Jan) van Zyl	Director	Sandveld
Mr H P (Henk) Jacobs	Director	South Western Free State
Mr P L (Pietie) Ferreira	Director	Eastern Cape
Mr M J (Mike) Green	Director	KwaZulu-Natal
Mr D D (Danie) Kühn	Director	North West
Mr J F (JF) van der Merwe	Director	Western Free State
Mr L (Leon) Rix	Director	South Western Cape
Mr J A F (Johan) van den Heever	Director	Loskop Valley / Processing producers
Mr M J (Johan) van Greunen	Director	Southern Cape
Mr G A (Gary) Vorster	Director	North Eastern Cape
Mr J R (Rudi) Heinlein	Director	Limpopo
Mr L (Tiekie) de Kock	Director	Seed potato growers
Ms N M M M (Nonie) Mokose	Director	Enterprise development and small scale producers
Vacant	Director	Chairperson: Audit Committee

Forums

- Potato Industry Forum
- Packaging Forum
- Processing Forum
- Seed Potato Traders Forum
- Exporters Forum

Potatoes South Africa renders the necessary administrative and secretarial services to all forums and committees, with the exception of the National Seed Potato Committee and the Seed Potato Growers' Forum, as this service is rendered by Potato Certification Service.

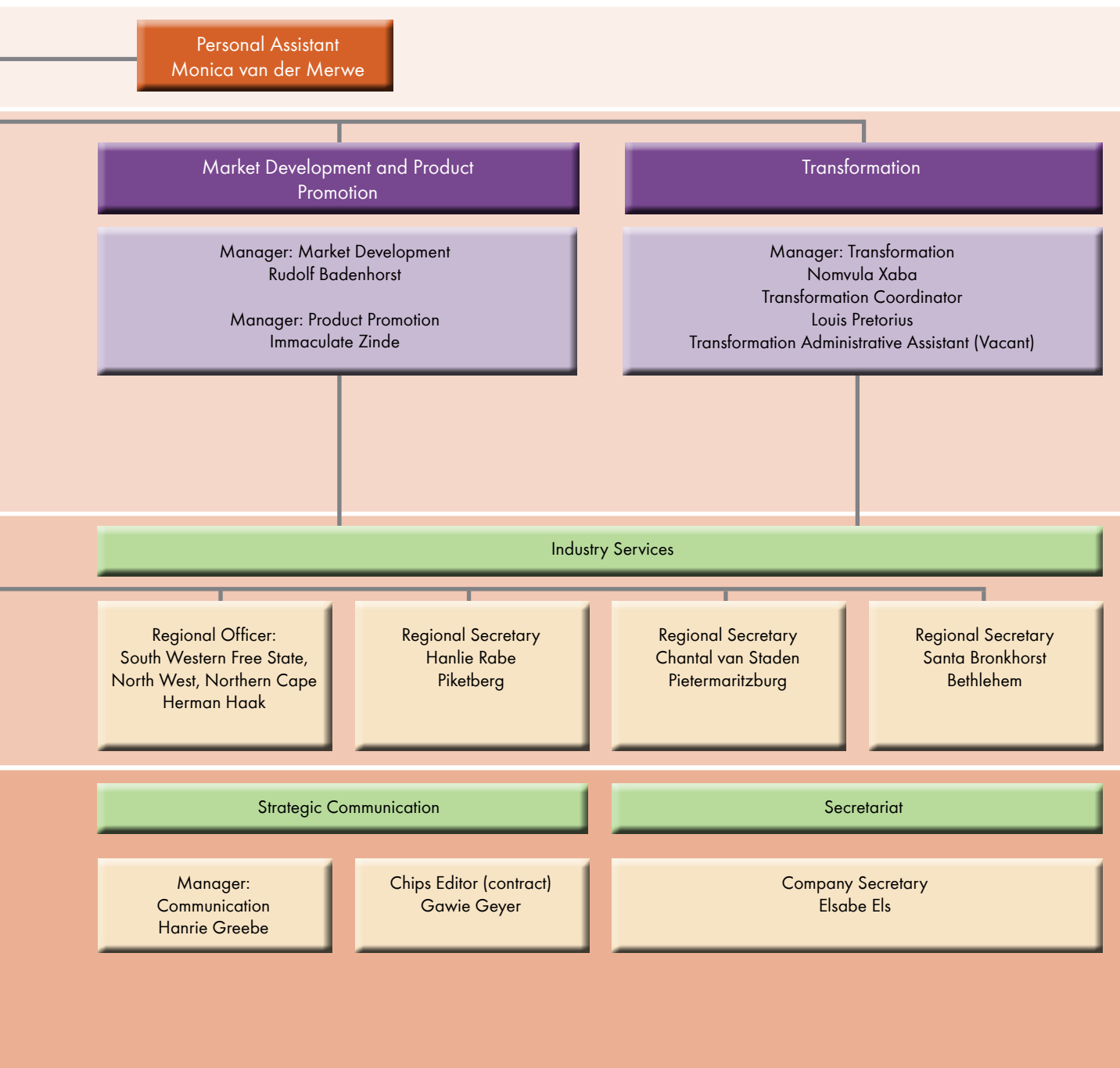
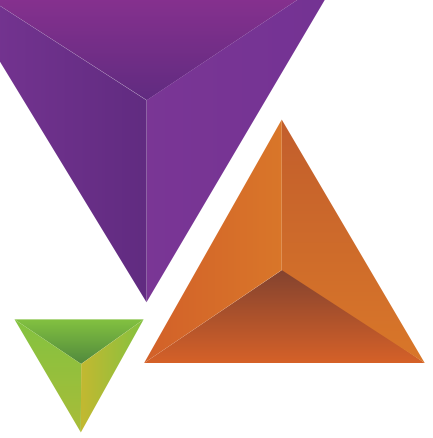
Table 2: Personnel structure



ADMINISTRATION

During the period under review, Potatoes South Africa employed 27 staff members at its head office in Pretoria and its six regional offices and one sub-regional office to ensure optimum rendering of services to the industry. The services rendered are comprehensively reported on in the core business reports.

The staff is headed up by an executive management, comprising the chief executive officer, the company secretary and the managers of the five core business and support services departments.





INDUSTRY INFORMATION SERVICE

Introduction

Potatoes South Africa's Industry Information Service is regarded as a supplier of timely, accurate and relevant market and production information and business intelligence to all stakeholders in the South African potato value chain in particular, but also to other role players that have an interest in agriculture.

Potatoes South Africa is of the opinion that a competitive free market that functions effectively is the best way to convert limited resources into products consumers want to purchase. One of the requirements for the proper functioning of a competitive free market is for industry role players to have access to uniform and comprehensive information. With this in mind the organisation's Industry Information Service contributes to the maintenance of a competitive free market in the interest of the potato producer in particular and the potato industry in general.

The Department: Industry Information Service supplies the potato industry with the following two categories of information and thereby contributes the profitability and sustainability of the potato producer:

- Data and information generation
 - Collecting and disseminating of information.
- Intelligence creation
 - Adding value to information.

Goal

The vision of Potatoes South Africa's industry information service is:

- To be regarded as an outstanding supplier of market information and business intelligence to the South African potato value chain.

Industry information service falls under the following strategic goal of Potatoes South Africa:

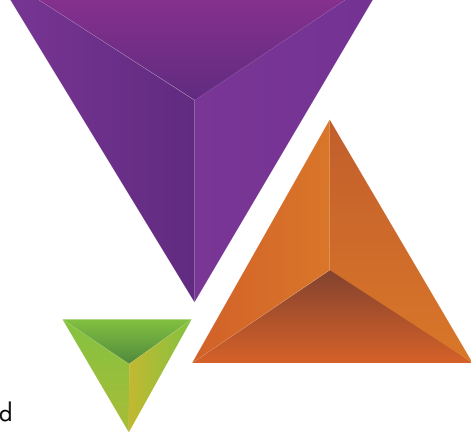
- To provide industry strategic knowledge management support.

In order to attain the abovementioned goal the Department: Industry Information Service collects, interprets and disseminates marketing and strategic information on all aspects related to the potato industry that is correct, timeous and relevant for all role players in order to:

- Improve the level of decision making, especially at producer level.
- Create wider transparency to ensure that all role players are kept informed about market prices and other relevant aspects.

With the information at their disposal:

- Individual commercial producers are in a position to take market-related decisions when planning production and marketing. It also allows similar co-ordinated action to be taken within a specific production region as well as on a national basis.
- Processors, market agents, market managements, pre-packers, supermarkets, retailers and hawkers have daily access to information on the supply of and the demand for potatoes as well as prices and quality.
- End users have a transparent view of the supply of and the demand for potatoes as well as potato prices and quality on a daily basis.
- Emerging black farmers are in a position to benchmark their own potato prices with market prices. They can also compare input costs to their potato production volumes and selling prices and thereby be in a position to decide whether potato production is a viable proposition.



Key focus areas

The Department: Industry Information Service's nine key focus areas can be categorised as follows:

Focus areas	Components
Production and market information	<ul style="list-style-type: none"> • Market and marketing reports: Daily, weekly, monthly, seasonal and annual. • Regular crop reports from 16 production regions. • Bi-weekly crop estimates. • Monthly market comment. • Fresh produce markets: trend analysis.
Production costs	<ul style="list-style-type: none"> • Updating of production costs: major regions. • Analysis of packaging and marketing costs. • Updating of price / yield model (fresh versus processing potatoes). • Trend analysis and projections. • Transport cost model. • Transport costs and related issues.
Agri Benchmark	<ul style="list-style-type: none"> • Updating of typical potato farm in each of the four major regions. • Comparisons of typical potato farms between countries. • Test "what if" scenarios on local typical farms (farm level modelling).
Potato value chain analysis	<ul style="list-style-type: none"> • Determine the following indicators: size of industry, per capita consumption, main varieties, consumer spending, etcetera.
Potato industry model	<ul style="list-style-type: none"> • To present an outlook of potato production for the coming years by using a certain set of assumptions. • By doing scenario analyses or using a different set of assumptions a better understanding of the potato industry is generated.
Labour and machinery in the potato production process	<p>Important indicators were studied and norms were established:</p> <ul style="list-style-type: none"> • Labour use efficiency (e.g. man-days per hectare). • Pack house capacities (e.g. tonnage potatoes packed per day). • Pack-house efficiency (e.g. number of 10 kg bags packed per labourer per day). • Investment in machinery and implements.
Risks involved in potato farming, especially under dry land conditions	<ul style="list-style-type: none"> • To understand and quantify the risk in dry land potato farming in the Eastern Free State region. • To measure and quantify the performance of potato production against alternative crops such as maize, soya beans and sugar beans. This measurement relates to risk, profitability, capital requirements, labour requirements and future scenarios pertaining to market fluctuations. • To generate a sensitivity analysis for dry land potato production under various scenarios. • To collaborate with producers in order to understand the drivers of change
Build and maintain database	<p>On a daily, weekly, monthly, seasonal and annual basis Potatoes South Africa collects all kinds of information. All relevant information needs to be collected, processed and disseminated in an orderly manner. Relevant information is added to the database.</p>
Ad hoc / other	<p>Competition Commission, labour survey, SARS and VAT, etcetera.</p>



Information Committee

The composition of the Information Committee is as follows:

Name	Position
Mr Johan van Zyl	Chairperson
Mr Human du Preez	Member
Dr André Meiring	Member
Mr Jan van Zyl	Member
Mr Danie Steyn	Member
Mr Gerhard Posthumus	Member

Market trends

During the 2014 crop year 51 435 hectares of potatoes were planted, about 1 500 hectares more than the previous year's plantings. The increase in hectares led to 2014 yielding a crop of about 224 million 10 kg bags that is nearly seven million 10 kg bags more than was the case in 2013 (see Figure 1).

Take note of the major increase in crop size over the past ten years whereas the number of hectares planted moved sideways. The phenomenon could, inter alia, be ascribed to the introduction of higher yield cultivars and improved production practices.

In respect of the 2014 crop year the Limpopo production region planted the most hectares, i.e. 10 688 hectares which represent 21% of the total hectares planted (see Table 1). The Eastern Free State's 9 926 hectares were the second (the bulk of the plantings were under dry land conditions) followed by the Sandveld and then the Western Free State. Limpopo realised the biggest crop of close to 45 million bags; that is 20% of the national crop. The four major production regions planted 68% of the total hectares and realised 67% of the national potato crop.

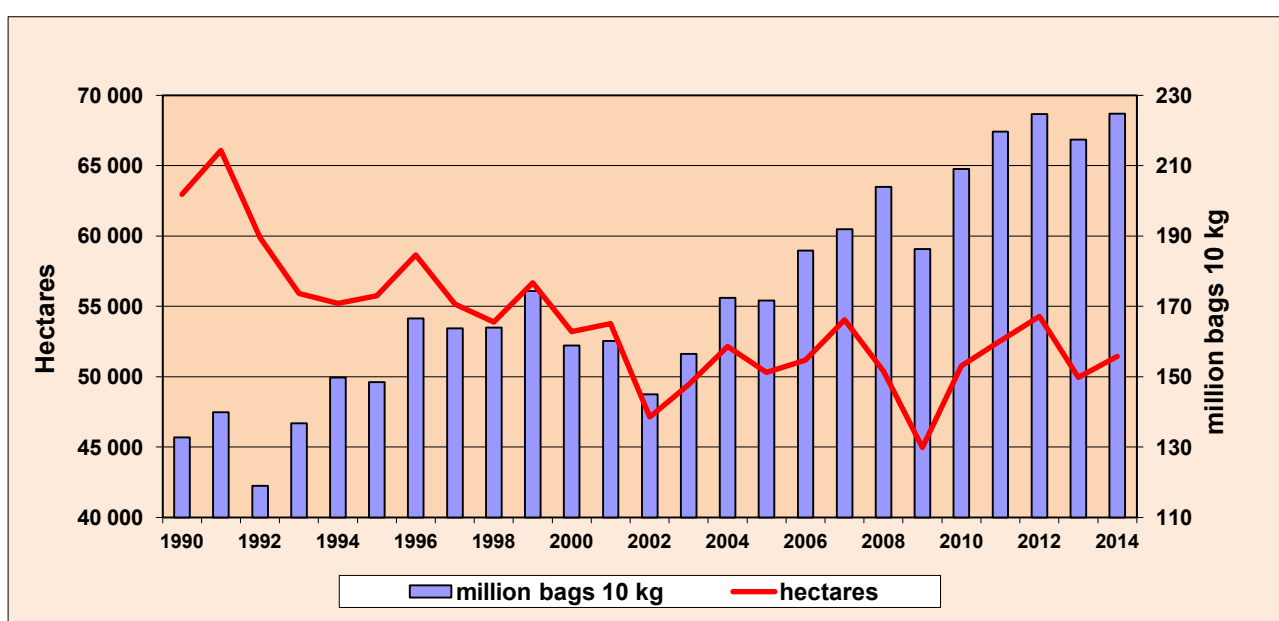


Figure 1: SA Potato industry - Hectares and Crop size

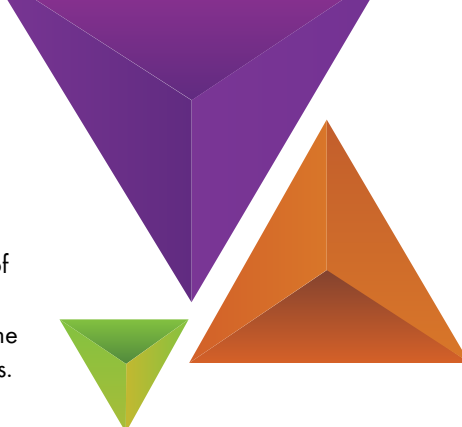


Table 1 also indicates the average yields for the different regions. The average yields of the majority of regions fluctuated between 40 tonnes and 45 tonnes per hectares. Dry land cultivation primarily took place in the Eastern Free State and to a lesser extent in the Western Free State which naturally had an effect on the average yields of these regions.

In respect of the 2014 crop year the number of commercial producers (farming units) dropped to 561. This is 32 producers less than in the previous year when less hectares of potatoes were planted. Twenty years ago there were more than 2 000 potato producers.

According to Figure 2 approximately 53% of all the potato producers plant less than 51 hectares of potatoes. These producers combined plant about 20% of all hectares. On the other hand 9% of all producers each plant more than 200 hectares of potatoes. The latter group combined plant about a third of all hectares.

During the year under review the cultivar Mondial retained its position as the number one cultivar. Based on deliveries to markets Mondial represents 61% of all deliveries, followed by Sifra with 18% and Valor with 6%. Of all the hectares planted Mondial represents 45%, Sifra 13% and Fianna 6%.

The real market price (after provision has been made for inflation) for potatoes are moving sideways. For a number of years a constant upward trend was experienced but not anymore. The significant larger crops exerted downward pressure on real prices. The real market price for 2014 was lower than the previous year.

Table 1: Potato production in 16 regions - 2014 crop year

	Streek	Hectares	% of hectares	Total harvest in 10kg bags	% of harvest	Average yield in ton/ha
1	Limpopo	10,688	21%	45,134,538	20%	42.2
2	Western Free State	6,932	13%	38,365,211	17%	55.3
3	Sandveld	7,279	14%	33,695,400	15%	46.3
4	Eastern Free State	9,926	19%	32,404,004	14%	32.6
5	KwaZulu-Natal	3,499	7%	14,897,880	7%	42.6
6	North West	1,453	3%	8,504,794	4%	58.5
7	Mpumalanga	2,276	4%	8,486,595	4%	37.3
8	North Eastern Cape	1,632	3%	7,828,000	3%	48.0
9	Northern Cape	1,446	3%	6,679,889	3%	46.2
10	Eastern Cape	1,624	3%	6,445,800	3%	39.7
11	South Western Free State	1,142	2%	6,000,571	3%	52.5
12	Ceres	1,127	2%	5,877,961	3%	52.2
13	Loskop Valley	1,227	2%	5,560,900	2%	45.3
14	Gauteng	889	2%	3,446,859	2%	38.8
15	Southern Cape	245	0.5%	1,076,400	0.5%	43.9
16	South Western Cape	50	0.1%	208,800	0.1%	41.8
		51,435		224,613,602		43.7



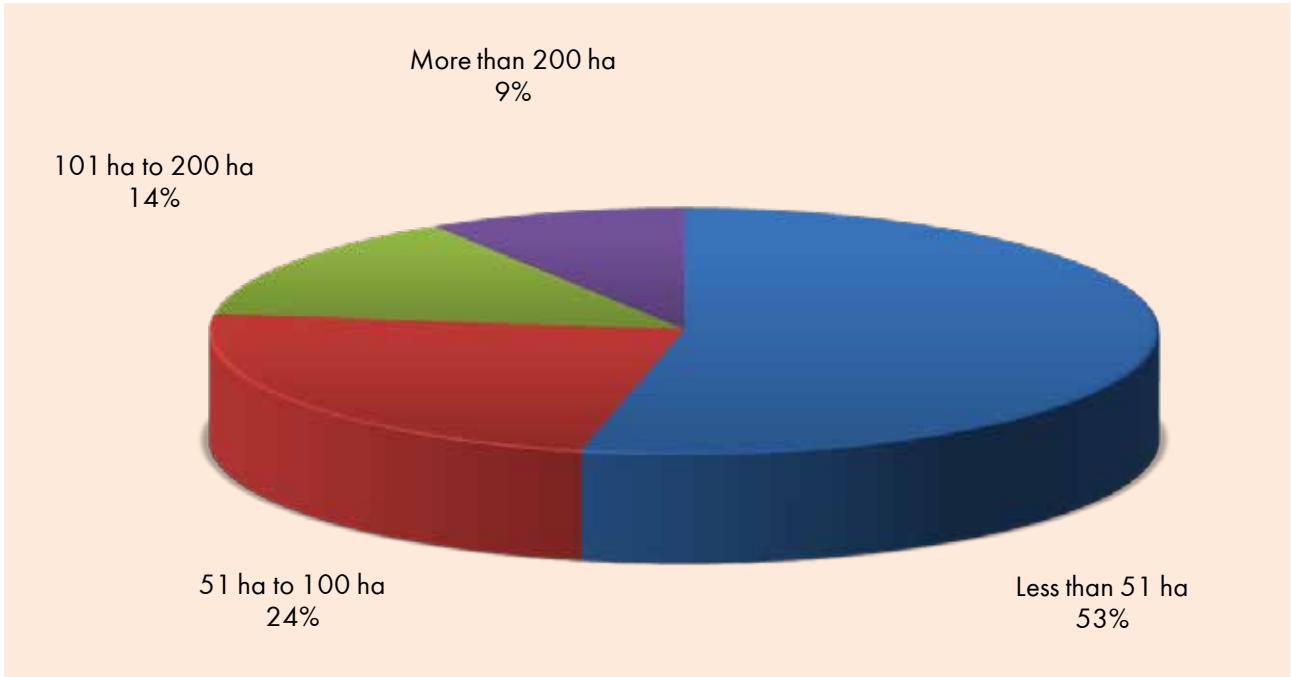


Figure 2: Percentage of producers versus size of planting in hectares (2014)

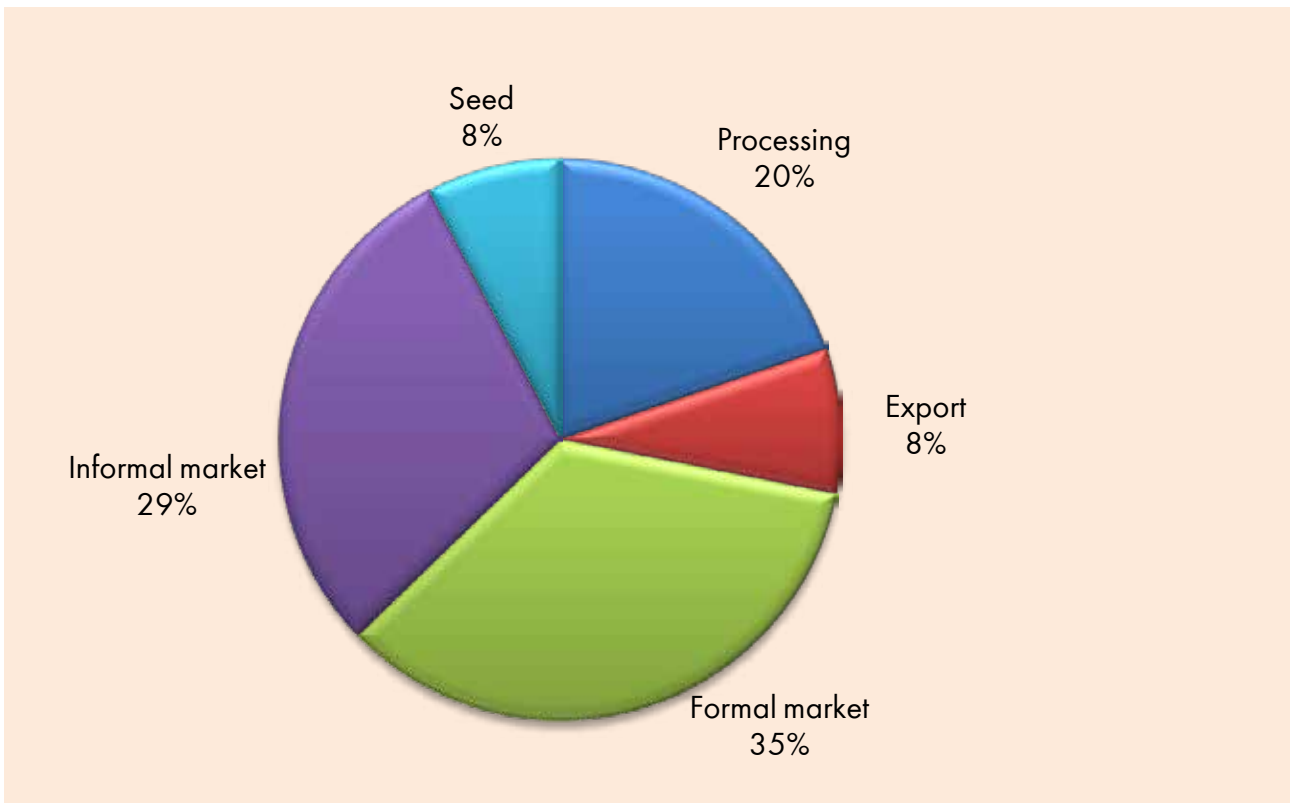
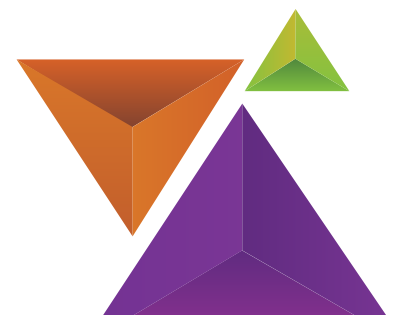
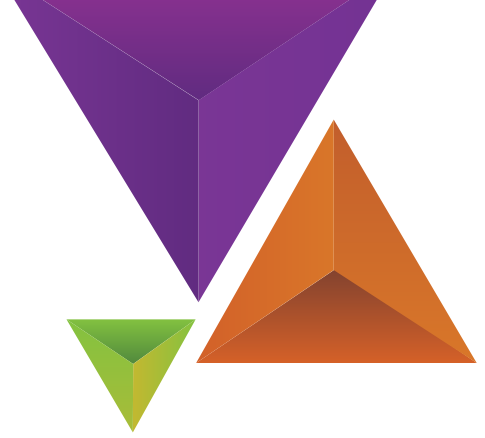


Figure 3: Distribution of total potato crop - 2014 crop year





RESEARCH AND DEVELOPMENT



The research needs of the potato industry are addressed at two levels, namely research of national interest and normally performed by Potatoes South Africa’s research partners, and research of regional interest, normally performed by potato workgroups. Workgroups are supported by the research team of Potatoes South Africa. Identification of research needs is facilitated by the Research Committee (Table 1). Prioritisation of research needs, evaluation of project proposals and recommendations on spending of the research budget, are also the responsibility of the Research Committee. The Research Committee is supported by the Potato Industry Development Trust: Technical Advisory Committee (Table 2) and the Workgroup Committee (Table 3).



Table 1. Research Committee

Member	Position	Represent
Mr J A F van den Heever	Chairperson	Loskop Valley, Mpumalanga and the Processing Committee
Mr G F Bester	Vice chairperson	Eastern Free State
Mr G G Hill	Member	KwaZulu-Natal and North Eastern Cape
Mr A de Villiers	Member	Sandveld and Ceres
Mr G Gadda	Member	Limpopo
Mr A S Coetzee	Member	South Western Free State and Northern Cape
Mr L Rix	Member	South Western Cape, Southern Cape and Eastern Cape
Mr P G J Posthumus	Member	Western Free State and seed growers

Table 2. PIDT: Technical Advisory Committee

Member	Position	Represent
Dr J G Niederwieser	Chairperson	Research Committee
Dr F I du Plooy	Member	PIDT: Trustee
Dr F D N Denner	Member	Pathologist
Mr J J de V Bosman	Member	Agronomist



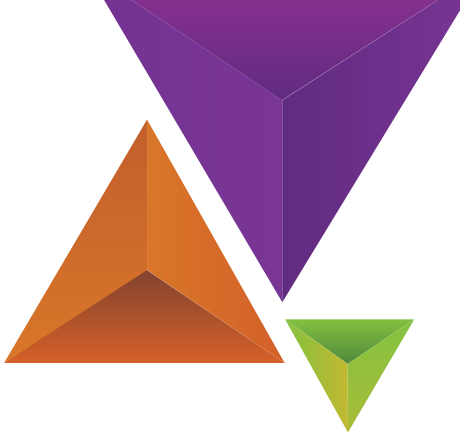


Table 3. Potato Workgroups Committee

Member	Position	Represent
Mr G F Bester	Chairperson	Research Committee
Dr F I du Plooy	Member	PIDT trustee
Mr J J de V Bosman	Member	PIDT: Technical Advisory Committee
Mr P Brink	Member	Sandveld
Mr I Oosthuizen	Member	Ceres
Mr R Cilliers	Member	Eastern Cape
Mr S Bell	Member	North Eastern Cape
Mr K Craig	Member	KwaZulu-Natal
Mr J Craven	Member	Eastern Free State
Mr I Cronje	Member	Western Free State
Mr J Hugo	Member	South Western Free State
Mr J Steenkamp	Member	Northern Cape
Mr M Bylsma	Member	North West
Mr S Grobbelaar	Member	Limpopo
Mr D Ras	Member	Loskop Valley

Research focus areas

Research in the potato industry currently focuses on the following aspects:

- Cultivar evaluation to increase yield.
- Soil health and conservation as well as sustainable utilisation of natural resources.
- Quality of table and seed potatoes.
- Virus and aphid management.
- Water use and quality.
- Cultivation practices, and in particular plant nutrition and volunteer control.
- Management of soil-borne diseases: common scab, nematode, powdery scab and soft rot.
- Management of potato tuber moth. Originally this aspect was not included in the list of strategic focus areas, but because producers have indicated during surveys conducted that potato tuber moth remains the most difficult potato pest to control, it has been included.

The spending of the research budget for 2014/15 is set out in figure 1.

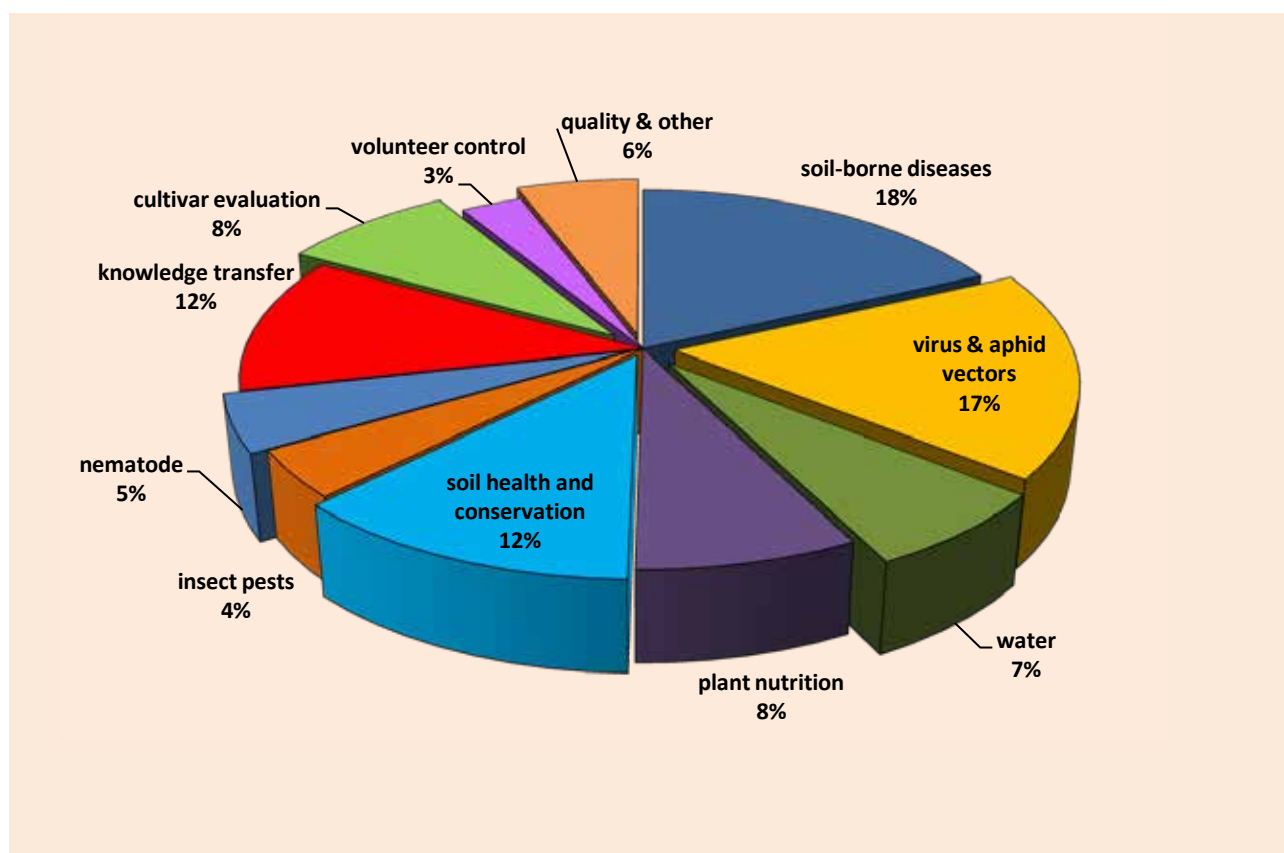


Figure 1. Research budget spending in 2014/15

Research highlights

PCR technology applied for certification

Funding from Potatoes South Africa's research programme contributed to the validation and establishment of PCR technology at Plantovita, the controlling laboratory for the potato industry. The Department of Agriculture, Forestry and Fisheries visited the laboratory at Plantovita and subsequently approved the use of PCR technology for testing of PVY and PLRV for certification purposes. Seed growers who make use of the technology, now receive results four weeks earlier compared to using the ELISA test method.

Quality

The average potato yield in South Africa increases continuously and is currently at 43 tons per hectare. The planting of modern cultivars and increased application of fertiliser, undoubtedly contribute to this achievement. Under local conditions where temperature extremes (both high and low temperatures) often occur during the growing season, high yield can be accompanied by poor internal quality and post-harvest decay. Research on fertiliser guidelines for modern cultivars was thus initiated. Research conducted by a team from the University of Pretoria on the effects of application rate and timing of nitrogen showed that a high application rate (340 kg/ha) do increase yield, but also lead to a decrease in internal quality because of internal brown fleck, hollow heart and low specific gravity. This work must be extended to include more popular cultivars, soil types and climates. Projects at the University of Stellenbosch and the Nelson Mandela Metropolitan University are investigating other effects of nutrition on modern cultivars.

Nematode

Nematode remains one of the most common problems for the South African potato producer. Research conducted by the University of Pretoria showed that root-knot nematode does not only lead to yield losses, it also seems to facilitate infection of roots by soft rot pathogens. Until recently, it was believed that root-knot nematode poses the biggest threat to potato production in South Africa. The Agricultural Research Council, however, analysed data from the 'South African Plant-Parasitic Nematode Survey' with records since 1947 and found that of the 282 records on potato, 95 were plant parasitic nematodes from ten nematode families. The two genera most commonly found were *Pratylenchus* (lesion nematode) and *Meloidogyne* (root-knot nematode). The research team believes that the effect of *Pratylenchus* is under-estimated as symptoms are difficult to recognise.

Powdery scab

Powdery scab, a disease caused by *Spongospora subterranea* f.sp. *subterranea*, was previously thought to pose a minor threat to potatoes in South Africa. However, both seed and table potatoes on the fresh produce markets were down-marked during certification and during quality control as a result of powdery scab lesions in the past year. Worldwide, pathologists recognise that management of this soil-borne disease is particularly difficult due to the ability of spores to survive for many years in the soil and on a large number of alternative host plants. An integrated disease management strategy is thus the only viable approach to limit yield loss and poor quality. Relative tolerance of potato cultivars to powdery scab is one of the components of such a strategy. Research at the University of Pretoria showed that when tolerance is rated, both root galls and tuber lesions should be rated and that some locally grown cultivars do show tolerance to both types of infection. A trial by Potatoes South Africa showed that green manure crops have the potential to suppress powdery scab symptoms. Work to evaluate the most common cultivars, alternative host plants and local soil conditions is in progress.

Potato Virus Y (PVY)

Research on Potato Virus Y (PVY) was successfully completed by the University of Stellenbosch. Results showed that the PVY^{N-Wilga} en PVY^{NTN} strains are the most common ones in South Africa and that they replaced the old strains. Locally grown cultivars vary in their ability to resist the movement of PVY^{N-Wilga} en PVY^{NTN}. The new strains are successfully identified in leaf tissue by the PCR and ELISA test methods. PVY can thus be managed successfully by applying best practices during seed production and certification.

Cultivar evaluation

Cultivar evaluation for yield and quality is done by the potato workgroups. Evaluation of popular locally grown cultivars has been extended to include tolerance to soil-borne diseases, viz. powdery scab, common scab, soft rot and root-knot nematode by the University of Pretoria and the Agricultural Research Council.

The first objective is the development of a standard method of evaluation under controlled conditions. The second objective is to evaluate the relative tolerance to the mentioned soil-borne pathogens. Since the management of soil-borne diseases will increasingly depend on an integration of various approaches, cultivar tolerance is an important element of such an approach.

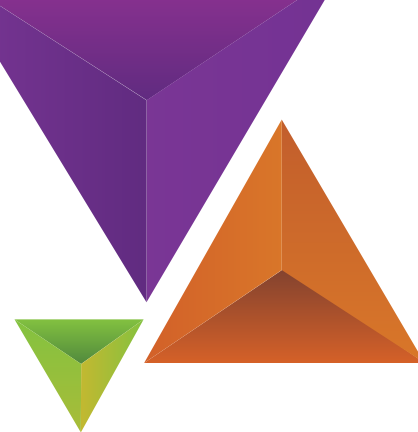
Knowledge transfer

Potato Research Symposium

The annual Potato Research Symposium was held on 5 and 6 August 2014 at Parys in the Free State. Researchers who receive funding from the potato industry through the Potato Industry Development Trust (PIDT), gave feedback on the progress with the research projects (Table 4) whilst the potato work groups reported on the trials conducted by them in the production regions (Table 5). The revised research strategy and list of projects funded were also presented to industry.



The BASF prize for best presentation by a researcher was awarded to Prof Dirk Bellstedt (University of Stellenbosch) for his research report on PVY. Mr Schalk Grobbelaar (Chairperson: Limpopo Workgroup) was the winner of the BASF prize for best workgroup presentation. He reported on the cultivar trial conducted at Tom Burke in Limpopo. The trophy for best attendance of a workgroup was won by the Western Free State. The Potato Industry Development Trust prize for best student presentation was awarded to Ms Chantel du Raan, a MSc student at the University of Pretoria. She presented the first season's results of the study on the effect of nitrogen application level and timing on yield and quality.



Final reports

Five final reports were compiled and made available on Potato South Africa's website www.potatoes.co.za/research/finalreports. The reports are:

- Black dot and silver scurf of potatoes in South Africa. PF Nortje, 2014.
- Impact of different climate change scenarios on future potato production in South Africa: Eastern Free State, Limpopo and Sandveld. MJ Steyn, *et al.*, 2015.
- Aphid monitoring in the South African potato industry. K Kruger, *et al.*, 2015
- Management of Potato Virus Y (PVY) in seed potatoes. K Kruger, *et al.*, 2015
- Bacterial wilt on potato: The South African experience. PF Nortje. 2015

Publications

The publication *Best Practices for the Handling of Seed Potatoes* was compiled with inputs from various role players. The publication is available from Potatoes South Africa, Potato Certification Service and on the website.

Potatoes South Africa's fact sheets are being revised and six are already available in English and Afrikaans.

A series of articles on post-harvest decay was also compiled and is available as a separate publication. It is also available on the website.

CHIPS

During the year under review 26 technical articles and twelve potato workgroup reports were published in CHIPS. The articles are available on Potatoes South Africa's website (www.potatoes.co.za/research/chipsarticles).

Courses and workshops

Research related courses and workshops are being conducted in the different production regions. During the year under review the following courses and workshops were held:

- Soil health – Piketberg, October 2014.
- Irrigation scheduling – Tom Burke, April 2015.
- Irrigation scheduling – Polokwane, April 2015.
- Sanitation in pack houses (half day workshop) – Bethlehem, April 2015.
- Sanitation in pack houses (half day workshop) – Douglas, May 2015.

Potato workgroup research

During the 2014/15 year under review, 20 cultivar evaluation trails were successfully executed at different locations in the potato production regions by the various potato workgroups (Table 5).

Table 4: Projects

	PROJECT	OBJECTIVE(S)	PROGRESS
CULTIVAR EVALUATION	<i>In vitro</i> maintenance of open potato cultivars (Long term project)	<ul style="list-style-type: none"> • Maintenance of open and sub-licensed ARC-cultivars <i>in vitro</i> • To make nuclear material available to commercial laboratories for multiplication of G0 material • To renew clones to prevent degeneration of nuclear material 	<ul style="list-style-type: none"> • <i>In vitro</i> virus-free plants of BP1 (1840), Up-to-date (400), Mnandi (1600), Vander-Plank (400), Herta (400) and Buffelspoort (520) were produced for commercial laboratories for multiplication • Open cultivars were successfully maintained for another year and a new clone of BP1 was established to prevent deterioration of the cultivar
	Cultivar evaluation	<ul style="list-style-type: none"> • To support potato workgroups to perform cultivar evaluation trials, to analyse data and to write reports on each trail 	<ul style="list-style-type: none"> • Cultivar evaluation trails were successfully performed in most regions (see Table 5)
SOIL HEALTH AND CONSERVATION	Conservation farming practices in the Sandveld (Long term project)	<ul style="list-style-type: none"> • Development of guidelines for conservation tillage practices in the Sandveld to reduce the effect of wind erosion • Evaluation of the effect of conservation tillage on yield, physical, chemical and biological status of soil • Evaluation of the effect of conservation tillage on water use efficiency • To determine the effect of tillage methods on the soil microbial population and incidence of soil-borne diseases. 	<ul style="list-style-type: none"> • For the second season, soil respiration and active carbon levels of plots that received minimum tillage were significantly higher than other treatments. The number of plant parasitic nematodes of the plots that received maximum tillage were significantly higher than for other treatments • Soil penetrometer readings differed between soil that received different tillage treatments • Yield of minimum tillage plots were once again higher than the other treatments, although not significantly so in the year under review
	Effect of green manure crops on the incidence of soil-borne diseases	<ul style="list-style-type: none"> • To determine whether green manure crops can reduce soil-borne disease incidence 	<ul style="list-style-type: none"> • Results of the first season's trials indicated that green manure crops such as bladdermennas may have an inhibitory effect on powdery scab. Other crops such as sorghum and saia, may however stimulate infection and/or lesion development. This trials need to be repeated
	Crop rotation programme for the Eastern Free State (Long term project)	<ul style="list-style-type: none"> • To optimise the crop rotation programme in the Eastern Free State in order to improve soil health, soil physical and chemical conditions as well as profitability of dry land production 	<ul style="list-style-type: none"> • The first year of this project focussed on planning and preparation for a long term project • Four rotation cycles of five years each were designed including maize, wheat, sunflower and dry beans followed by a fallow year before potato • Soil and root samples were collected during and after the potato growth period to study soil microbe populations • Precision soil samples for chemical and physical characteristics of the experimental site was taken to rectify chemical imbalances



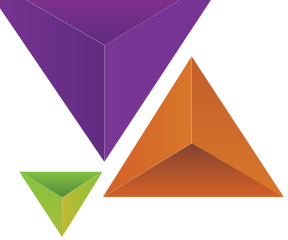


Table 4: Projects

	PROJECT	OBJECTIVE(S)	PROGRESS
QUALITY	Development of a method to test the suitability of cultivars in terms of culinary use	<ul style="list-style-type: none"> To determine how culinary characteristics of potato are affected by climate and production methods 	<ul style="list-style-type: none"> Analysis of the cooking tests done for a large number of workgroup trails, showed that specific gravity and dry mass are suitable characteristics to use to evaluate cultivars
VIRUS & APHID MANAGEMENT	Validation of RT-PCR technology to test for virus during testing for certification	<ul style="list-style-type: none"> To develop, optimise and validate RT-PCR technology to test for PVY and potato leaf roll virus during certification 	<ul style="list-style-type: none"> This project was concluded successfully. The PCR laboratory at Plantovita (the controlling laboratory of the potato industry), the standard working procedures and the expertise of the technologist was rated by the Department of Agriculture, Forestry and Fisheries as very good. They approved the use of RT-PCR for testing for PVY and PLRV for certification A number of samples have already been tested using the technology
	Management of potato leaf roll virus in South Africa	<ul style="list-style-type: none"> To monitor the spread of potato leaf roll virus (PLRV) during growth season To carry out genome determinations of isolates of PLRV from different regions in order to determine the difference between the local and other isolates of the virus 	<ul style="list-style-type: none"> Local isolates of PLRV are more related to isolates from the USA and Australia than to strains originating from Europe It appears as if more variance exists between local isolates of PLRV than in the rest of the world. Bio-informatic-analyses indicates significant differences between the coat proteins and mobility proteins of European and South African strains
	Management of Potato Virus Y in South Africa	<ul style="list-style-type: none"> To determine the relative tolerance of commercial potato cultivars to PVY^{NTN} 	<ul style="list-style-type: none"> By applying the RT-PCR test, the speed at which PVY^{NTN} moves through plants, and tuber necrosis were used as indicator of the relative tolerance to the virus Twelve cultivars were tested and the tolerance varied from very susceptible to tolerant. This information will enable farmers to plant cultivars that are tolerant to the virus in regions where virus control is difficult
	Aphid monitoring in four seed potato production regions (Long term project)	<ul style="list-style-type: none"> To monitor aphids in the Sandveld, Ceres, Northern Cape, Western Free State and KwaZulu-Natal in order to study the effect of climate in virus pressure To timeously inform seed growers in the areas above when aphid pressure increases so that they can act pro-actively to control aphids and virus 	<ul style="list-style-type: none"> In the Koue Bokkeveld (Ceres), activity of the peach aphid was approximately a month earlier than most other years. Since seed plantings are still actively growing at that time, it is important to continue monitoring to identify the source of aphids In the Sandveld the relationship between aphid numbers and rainfall was once again observed. This means that high aphid numbers can be expected during dry seasons



Table 4: Projects

	PROJECT	OBJECTIVE(S)	PROGRESS
WATER USE AND QUALITY	Facilitation of irrigation scheduling practices in South Africa	<ul style="list-style-type: none"> Evaluation of different irrigation scheduling equipment and instruments on a number of farms in different production regions To promote irrigation scheduling in order to enable producers to improve water use efficiency and lower electricity costs 	<ul style="list-style-type: none"> The hardware, recommendations and services of two service providers were tested on two farms in Limpopo Participating farmers were visited regularly to offer support in the installation of sensors, set-up of software and interpretation of data The Cosmic Ray Probe was tested for the first time on potatoes on three farms. The advantage of this instrument may be that the soil water status of a whole field may be measured at once. It appears, however, that measurements taken by the Cosmic Ray probe measures water in the top layers of soil only. The instrument will be tested for another year to evaluate its potential
	Soil water monitoring in the Sandveld (Long term project)	<ul style="list-style-type: none"> To determine the impact of water use for potato production on soil water levels and quality and to identify problems areas To study the water balance in the Sandveld and to determine the source(s) of the underground water to facilitate long term planning 	<ul style="list-style-type: none"> Measurements since 2004 showed that soil water levels and quality generally decrease during periods of drought, whereas during periods with normal and above normal rainfall, both the water levels and the quality of ground water recover Boreholes where quality and/or water levels show continuous deterioration were identified. Farmers were informed and due action has been taken
CULTIVATION METHODS AND NUTRITION	Effect of calcium nutrition on potato production	<ul style="list-style-type: none"> To determine the effect of calcium in irrigation water on yield and quality of potato 	<ul style="list-style-type: none"> The minimum tuber Ca content should be 0.15% in the periderm and 0.03% in the medulla to prevent physiological defects such as brown fleck and hollow heart, and to reduce post-harvest decay caused by soft rot Ca must be available for uptake in the stolon layer during the tuber initiation and early tuber fill stages at 125 – 250 ppm
	Volunteer control	<ul style="list-style-type: none"> To test herbicides for the control of volunteer potato plants 	<ul style="list-style-type: none"> Cultivars vary in their sensitivity towards different pre-emergence herbicides. This means that each potato cultivar will have to be tested Both mesotrion en metham potassium give satisfactory control of volunteer potatoes, but the exact application level for these herbicides will have to be determined Glyphosate gives good control when applied at a very young stage of the volunteer potato plant. Control with glyphosate is thus very difficult
	Effect of nitrogen nutrition on yield and quality	<ul style="list-style-type: none"> To determine how combinations of different levels and timing of application of nitrogen, affect tuber initiation, yield, size distribution and quality of modern cultivars 	<ul style="list-style-type: none"> Three cultivars used in the study responded best overall with 240kg/ha N, of which 70% was applied with plant and 30% three weeks after emergence High application of N resulted in an increase of internal brown fleck and hollow heart and a decrease in specific gravity



Table 4: Projects

	PROJECT	OBJECTIVE(S)	PROGRESS
MANAGEMENT OF POTATO TUBER MOTH	Survey of insects on potato in South Africa (Long term project)	<ul style="list-style-type: none"> To determine the pest status of insects on potato in South Africa 	<ul style="list-style-type: none"> To date, the survey was conducted in eleven regions and the potato tuber moth was identified as the most important pest in all regions In the regions surveyed during this year (Mpumalanga, Eastern Cape, South Western Free State and Northern Cape), potato leaf miner was the second most important pest. Nematode was the third most important pest in three of these regions
	Integrated management of potato tuber moth	<ul style="list-style-type: none"> To investigate the effectivity of feromone traps to monitor potato tuber moth To develop protocols to monitor potato tuber moth 	<ul style="list-style-type: none"> The number of potato tuber moths caught in pheromone traps that were placed in different places in a potato field, were the same Commercially available traps were not as effective as the adapted trap Pheromone kept in a fridge for ten years was as effective as fresh samples
MANAGEMENT OF SOIL-BORNE DISEASES	Integrated management of root-knot nematode	<ul style="list-style-type: none"> To develop management practices to decrease the populations of <i>Mloidogyne</i> during potato production 	<ul style="list-style-type: none"> Analysis of records of the 'South African Plant Paracitic Nematode Survey', and the 'National Collection of Nematodes', showed that 95 nematode genera of 10 families of plant paracitic nematodes were isolated from potato since 1947. The families include the Anguinidae, Belonolaimidae, Pratylenchidae, Hoplolaimidae, Heteroderidae, Criconematidae, Tylenchulidae, Trichodoridae en Longidoridae
	Evaluation of cultivars for tolerance to soil-borne diseases	<ul style="list-style-type: none"> To determine the relative tolerances of commercially grown cultivars to soil-borne diseases (root-knot nematode, powdery scab, common scab and soft rot) 	<ul style="list-style-type: none"> The pathogenicity of 30 common scab causing <i>Streptomyces</i> isolates were tested. Two of the most pathogenic of these, were used to infect five potato cultivars. This experiment will be repeated in glass house and field trails Ten cultivars were evaluated for tolerance against the soft rot pathogen <i>Pectobacterium carotovorum</i> subsp <i>brasiliense</i> (Pcb). Preliminary results suggest that the cultivars BP1 and Sifra may be tolerant to black stem and that Mondial and Valor may be susceptible The methodology to evaluate potato cultivars for nematode tolerance was developed and four cultivars were tested. The repeatability of the methods will be tested in the next year Tolerance of potato cultivars against infection by <i>Spongospora subteranea</i> subsp <i>subteranea</i> was previously evaluated in large field trails. Methodology to carry out the evaluation under controlled conditions now receives attention
	Management of soft rot	<ul style="list-style-type: none"> To determine how long the soft rot causing pathogen, survives in fallow soil 	<ul style="list-style-type: none"> Pot trails showed that <i>Pectobacterium carotovorum</i> subsp. <i>brasiliense</i> does not survive for longer than six months in fallow soil.
KNOWLEDGE TRANSFER	Development of fact sheets	<ul style="list-style-type: none"> To revise and update the current fact sheets and to develop new ones as the need arises 	<ul style="list-style-type: none"> Six fact sheets were developed and are available in Afrikaans and English (bacterial wilt, common scab, soft rot-black stem, silver scurf-black dot, potato tuber moth and potato leaf miner) A booklet <i>Best Practices for the handling of seed potatoes</i>, were published A booklet containing Chips articles on post-harvest decay was published
	Farmers' courses	<ul style="list-style-type: none"> To develop and offer farmers' courses 	<ul style="list-style-type: none"> A course in soil health was offered at Piketberg Courses in irrigation scheduling was offered at Tom Burke and Polokwane Workshops on pack house sanitation was held at Bethlehem and Douglas
	Potato Research Symposium	<ul style="list-style-type: none"> To establish a platform where researchers and workgroups give feedback on progress with research progress 	<ul style="list-style-type: none"> The symposium was held at Parys, Western Free State on 5 and 6 August 2014 and was attended by about 180 persons from various sectors of the industry

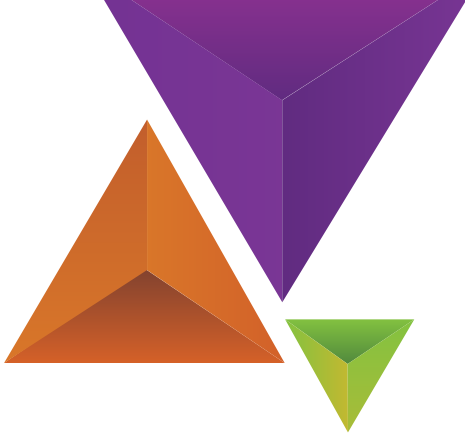


Table 5. Cultivar evaluation trials - 2014/15

Region	Locality	Target market	Cultivation practice
Ceres	Donkerbos	Fresh market	Irrigation
Eastern Cape	Patensie	Fresh market	Irrigation
Eastern Free State	Warden	Fresh market	Dry land
Eastern Free State	Warden	Processing	Dry land
Eastern Free State	Oranjeville	Fresh market	Irrigation
Eastern Free State	Marquard	Fresh market	Dry land
KwaZulu-Natal	Weenen	Fresh market	Irrigation
KwaZulu-Natal	Kokstad	Fresh market	Irrigation
Limpopo	Polokwane	Fresh market	Irrigation
Limpopo	Tom Burke	Fresh market	Irrigation
Mpumalanga	Middelburg	Fresh market	Irrigation
North Eastern Cape	Ugie	Fresh market	Irrigation
North West	Louwina	Fresh market	Irrigation
Northern Cape	Douglas	Fresh market	Irrigation
South Western Free State	Petrusburg	Fresh market	Irrigation
Sandveld	Aurora	Fresh market	Irrigation
Sandveld	Graafwater	Fresh market	Irrigation
Western Free State	Bulfontein	Fresh market	Irrigation
Western Free State	Kroonstad	Fresh market	Dry land
Loskop Valley	Marble Hall	Processing	Irrigation





MARKET DEVELOPMENT AND PRODUCTION PROMOTION



The 2014/2015 financial year marked the onset of Potatoes South Africa's new market development and product promotion strategy. The main aim of the new strategy is to increase the demand for potatoes in South Africa and abroad, in line with the organisation's overarching strategy.

Bemarkingskomitee

Member	Representation
Mr Rudi Heinlein	Chairperson Table potato producers
Mr Mike Green	Table potato producers
Mr Van der Spuy Botes	Table potato producers
Mr.Joost Engelbrecht	Table potato producers
Mr Tiekie de Kock	Seed potato growers
Mr Johan van Zyl	Information Committee
Ms Nonie Mokose	Transformation / BEE
Mr Johan van den Heever	Processors Forum
Mr Deon van Zyl	IMASA
Ms Mathilda van der Walt	National Agricultural Marketing Council
Ms Lillebeth Moolman	Potato Industry Development Trust
Ms Tutti Rudman	SA National Consumer Union
Mr Japie Engelbrecht	Processing industry

Market Development

Market Development in the South African potato industry can be described as the expansion of the total market for potatoes by entering a new segment of the market, converting non-users into users and/or increasing usage per user.

In order to develop the market it is imperative that attention is first afforded to the execution of the following strategic goals:

- Providing the industry with strategic knowledge management support that includes obtaining Industry strategic information such as consumer and trade Intelligence and knowledge transfer.
- Providing services that relates to potato consumption, comprising the following components:
 - The development of a potato value proposal (based on the intelligence acquired above) that aims to educate consumers and the trade (in a manner applicable to each) regarding the benefits of potatoes (as elaborated on in the strategic goals below).
 - Dissemination of the value proposal to consumers through generic product promotions.
 - Dissemination of the potato value proposal to the trade and industry through the development, maintenance and support of industry and trade relations



- Expansion of the South African potato industry beyond South Africa's borders through properly planned and orchestrated market access activities (Foreign Market Development).

This is all driven by the underlying need for:

- A better understanding of the consumers and their needs.
- A better understanding of the potato trade and the dynamics of the demand and supply drivers within the potato industry.
- The development of a potato value proposal to the consumer and the trade.
- The dissemination of the potato value proposal to the consumer and the trade.

The above is aimed at ultimately stimulating demand, increasing per capita annual consumption and thereby increasing the attractiveness of the industry for further development.

Consumer and trade insights

Potatoes South Africa's marketing strategy is directed by consumer buyer behaviour and trade research. Comprehensive research representative of South Africa's demographics were conducted, with special cognisance provided to getting a better understanding of the lower life style measurement (LSM) groupings. This has provided Potatoes South Africa with interesting insights into the informal and commuter market segments. The strategic recommendations from the studies included the following:

Comprehensive consumer buyer behaviour study:

- Work on the strategic positioning of potatoes of being 'good for you' thus lowering the negative perceptions that potatoes should be used in moderation.
- Influence the 'love-hate relationship' of consumers with potatoes positively.
- Educate consumers on different potato cultivars.
- Educate consumers on different potato characteristics.
- Educate consumers on potato quality.
- Improve consumers' quality experience.
- Increase point of purchase initiatives to entice spontaneous potato purchases.
- Innovate with packaging to increase purchase frequency.
- Provide consumer with convenience purchase options.
- Focus on cultural eating patterns of especially LSM 1 – 6.
- Track the following five key strategic marketing measurements every 12 to 24 months:
 - Quality perceptions of potatoes
 - Knowledge of health benefits of potatoes
 - Knowledge of potato types and cultivars
 - Price perceptions
 - Purchase frequency or purchase volume

Taxi commuter study:

- The hawker is a key strategic market segment and Potatoes South Africa must continue with its informal market strategy.
- Purchase frequency within the sector is relatively low compared to other consumer markets. Potatoes South Africa must work on marketing activities aimed at increasing the sectors purchasing frequency at point of purchase.
- This market buys potatoes mainly on the commute between work and home and uses public transport, Potatoes South Africa must therefore conduct consumer activations at central public transport venues.

Informal market hawker study:

Potatoes South Africa's research, supported by the board, has identified the informal market as a vitally important portion

of the South African consumer market for development. Point of purchase promotions are important, but the research has indicated that within this segment market development must also play a very important role.

The research identified several challenges within the segment:

- Security of tenure – the right to trade
- Marketing / selling space infrastructure:
 - Essential infrastructure (Water, sanitation, access to electricity)
 - Basic infrastructure (Selling space, storage)
- Logistics and operational materials:
 - Transport
 - Packaging
- Finance (access to credit)

Improvements in packaging

Paper and packaging quality specifications were regulated in the South African potato industry prior to 2010. Up until then, the packaging regulations were monitored by the industry, under the auspices of the Department of Agriculture Forestry and Fisheries, thereby ensuring access to a quality packaging materials.

In 2010, the department amended the packaging regulations and the potato packaging specification was omitted from the regulation. The reason provided by department for the omission was that they did not want to impose a packaging regulation that they viewed as being restrictive with regards to creativity and innovation concerning future packaging design.

The removal of the paper specification from the regulation, prompted that paper with different specifications were introduced for the purpose of bag manufacturing. Some of the bags were unfortunately of substandard quality. Complaints were received by Potatoes South Africa and subsequently the bags were sent to South African Bureau of Standards for testing. The result from the test identified the industry need for the establishment and implementation of paper quality specifications for the potato packaging material.

Subsequently a paper specification was developed that adheres to the strength requirements of the industry, in accordance with the results of the test that were conducted.

A code of conduct has been established and has been signed by the following manufacturers:

- Crown Bag
- Gerber Paper Products
- Nampak
- NNZ
- Sack Force
- Taurus Packaging

These manufacturers have committed themselves to manufacturing bags in adherence with the required standards.

Bags that adhere to the standard will carry the following logo:



Let's make markets work – Project Rebirth

Project Rebirth, a joint effort between the stakeholders operating on and overseeing the national fresh produce markets, aimed at improving the overall trade environment on these markets for all parties involved.

Codes of best practice were accepted and approved by the steering committee members on 10 February 2015. The codes outline the suggested roles and responsibilities of the following parties:

- The fresh produce market authorities
- Market agents and agencies
- Producers

It also outlines each role player's responsibility in terms of the following ten focus areas:

- Regulatory environment
- Communication
- Consignment control
- Safety and security
- Hygiene, cleanliness and food safety standards
- Infrastructure: Maintenance and capital expenditure
- Information management
- Risk and financial management
- Transformation
- Human capital development

The implementation and enforcement of the codes of best practice's on the national fresh produce markets will allow for an effective, efficient and transparent market environment where all role players can prosper together, thereby further developing the fresh produce industry in South Africa.

In light of the codes of best practice, Potatoes South Africa is currently busy with a process of stakeholder engagement with the Cape Town and Joburg Markets and the process will be expanded to include other markets as required.

The success of Project Rebirth will be determined by the successful uptake and implementation of the codes of best practice throughout the national fresh produce market environment in South Africa.

It was also decided by the steering committee that in view of the importance of this project, that the codes of best practice will be gazetted.

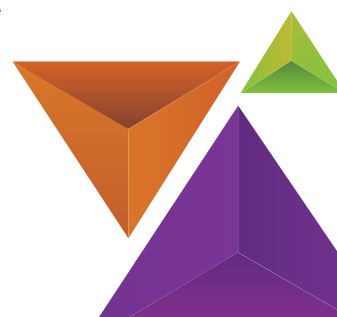
A scorecard has been developed as well to measure the performance of markets over time.

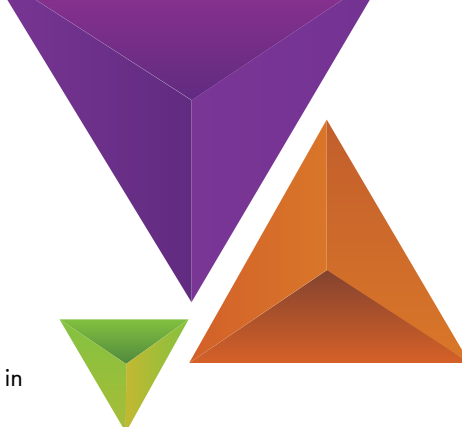
Potatoes South Africa and Agricultural Produce Agents Council cooperation

In view of the objectives that needs to be achieved for Project Rebirth and the codes of best practice, Potatoes South Africa and the Agricultural Produce Agents Council have partnered to work toward the betterment of the market environment through the facilitation of ethical trade.

National fresh produce markets are critical to the success of the South African potato industry. Currently 50% of all potatoes sold for consumption are sold through the national fresh produce markets at a turnover of around R 3.5 billion.

The ethical handling and trade of farmers produce is of paramount importance to effective marketing of their product. A healthy trust relationship between producers, market agents and market management is thus vital to the success of markets. This trust relationship is underwritten by adherence to a specific set of rules as set out in the Agricultural Produce





Agents Act, No 12 of 1992.

Consignment control is of specific significance for producers and was selected and ratified by the Potatoes South Africa Board and all the various production regions as a topic of particular importance to ensure that producers produce get marketed and sold in an ethical manner in a transparent and traceable environment.

Potatoes South Africa aims to partner with the Agricultural Produce Agents Council and the Institute of Market Agents of SA to ensure that a trust environment is created amongst the role players involved in the marketing of producers fresh produce thereby optimising the marketing of the product.

This will be achieved through training offered by the Agricultural Produce Agents Council to producers and Potatoes South Africa's regional personnel and stock audits on the national fresh produce agents.

The aim of training is:

- Providing producers with general knowledge of aspects stipulated by the Agricultural Produce Agents Act, No 12 of 1992.
- Providing producers with means to more effectively market their produce.
- Promotion of ethical trading.

Stock Audits:

The Agricultural Produce Agents Act, No 12 of 1992 provides a platform whereby ethical trade can be facilitated amongst producers and agents. Adherence to and enforcement of the rules ensures that producers receive maximum value for their produce when marketed through a produce agent.

Therefore Potatoes South Africa, in cooperation with the Agricultural Produce Agents Council, proposes to perform information integrity based national fresh produce market stock audits to increase the integrity and value of the sales and marketing channel, through the collection of consignment control information.

The expected outcome of this partnership should result in:

- Optimised, efficient and effective marketing within the national fresh produce market marketing channel.
- Increased integrity of the national fresh produce market marketing channel, through the facilitation of an ethical trade environment.
- Awareness amongst producers and other role players of the responsibilities and requirements of each role player in the marketing channel in term of the codes of best practice.
- Realisation of true market value, determined on a level playing field and in accordance with the required rules and regulations.
- Peace of mind for farmers as risks are timely prevented and mitigated.
- Providing a more effective mechanism to implement timely intervention where needed.
- Restoring confidence in markets.
- Assisting in the sustainable existence of a low cost marketing channel for large and especially emerging producers.

Quality standards, regulations and food safety

The potato industry is currently faced with a few market development challenges that Potatoes South Africa is proactively addressing in support of the sustainability of the industry. The pressure of the cost price squeeze (whereby the current escalation in costs of inputs such as energy, labour, fuel, chemicals and fertilisers are not in line with the growth in returns) has prompted the industry to investigate new alternatives too and also to assess current industry initiatives aimed at increasing the productivity of the sector.



The enhancement of potato quality and consumer quality perceptions have been identified as a strategic driver for growth within the South African market, but also as a vital support pillar for the industry's foreign market development and market access initiatives.

This has led to a renewed focus on:

- Investigation of the current status quo of the pre/post - Harvest management of potatoes, so as to identify areas for improvement.
- An inclusive evaluation of the industry's internal and external quality management systems, aimed at improving the consumer's quality perceptions.
- The establishment of industry best practices towards the assurance of food safety, whereby we have more industry participation in initiatives aimed at increased:
 - Transparency.
 - Traceability.
 - Adherence to good agricultural practice (GAP) programmes.

Within the ambit of the information supplied above Potatoes South Africa has engaged with the Department of Agriculture, Forestry and Fisheries, Prokon and the Perishable Products Export Control Board to allow for better understanding, industry support and needs alignment amongst the department, Potatoes South Africa and the quality management systems service providers that act under the auspices of the Department of Agriculture, Forestry and Fisheries on the following matters:

- Export standards and regulation and the enforcement thereof.
- Local and import regulations and the enforcement thereof.
- Minimum residue levels and the testing and enforcement thereof.

Potatoes South Africa is of the opinion that enhanced cooperation on the determination and enforcement of standards and regulation between the aforementioned parties will increase the industry's ability to provide quality produce into its respective markets and increase market access opportunities.

THE ESSENCE OF PRODUCT PROMOTION

PSA pursues a classical product promotion approach that finds its base in one of the 'Ps' of the marketing mix - **P**romotion. "Promotion refers to raising customer awareness of a product or brand, generating sales, and creating brand loyalty."

PUBLIC RELATIONS "Since we cannot change reality, let us change the eyes which we see reality."
- Niels Koenitzsch (Print, Broadcast & Online)

SALES PROMOTION Deployed for a pre-determined limited time to increase consumer demand, stimulate market demand and inspire consumers to make potatoes the heart of every meal
In-store and at industrial settings

DIRECT MARKETING It is not socialising, BUT, earning social currency. It is about community, engagement and building a voice.
Facebook, Twitter and Instagram

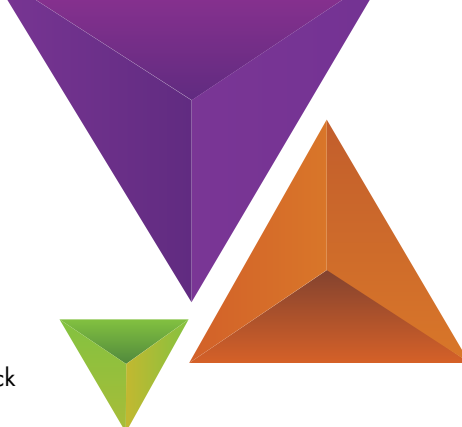
PERSONAL MARKETING Allows PSA to connect face-to-face with consumers, provide experiential marketing whilst identifying new market segments by targeting non-buying and new customers.
Tastings and fairs

ATL ADVERTISING Advertorials are considered by PSA to be a WIN WIN proposition that humanises our offering. They impart information that consumers deem valuable and impartial.

Don't just see the potato.
SEE THE POTENTIAL.

It consists of public relations, sales promotion, direct marketing, personal selling and advertising as outlined below:

Potatoes South Africa carried out a myriad of activities in the 2014/5 financial year under the slogan: *Don't just see the potato...SEE THE POTENTIAL*. Below is a feedback of all campaigns and milestones reached.



PUBLIC RELATIONS - Year round project which ended on 30 June 2015



Potatoes South Africa heavily relies on public relations to educate, inform and inspire South Africans about the good and healthy of potatoes in order to increase per capita consumption. In the March/April edition of Chips an article appeared on all the campaigns carried until end March.

On 28 May 2015 Potatoes South Africa observed World Hunger Day by developing the **Bust Hunger Campaign #BHC**. In South Africa where it is reported that eleven million people go to bed hungry, it was critical for the organisation to use public relations to showcase potatoes as a food crop that can positively contribute to issues of poverty and hunger. The campaign aimed to showcase potatoes as a food secure food.

To many South Africans, a potato is a vegetable and starch food on a plate. To just over 560 of South African potato producers and more than 50 000 permanent and temporary farm workers, it is a vital source of income. For many nutritionists it is a product that must form part and parcel of a nutrient-dense and balanced diet. For Potatoes South Africa employees it is a food crop that can address the triple threat issues of poverty, unemployment and inequality whilst inspiring increased per capita consumption across varying consumer segments.

It is with pride that we report that with just an investment of R250 000 to drive public relations, Potatoes South Africa was able to secure free

media exposure to the value of: R2 574 958 in the 2014/5 financial year. This is tantamount to a return on investment of 93%.

SALES PROMOTIONS

Potatoes South Africa pursues a two pronged approach in driving sales in the short term. Promotions earmarked for consumers purchasing from retailers and consumers purchasing from the informal sector are carried out for a predetermined period of time to stimulate demand and drive sales.

Retail promotions

Potatoes South Africa partnered with one of the big four retailers to carry out a national in-store promotion. The footprint of the promotion includes all 420 stores the retailer owns in South Africa. The promotion was focused on the 7 kg product line as recommended by its fresh produce procurement arm. The results of the promotion were smashing, delivering the following:

- 50% year-on-year sales increase on the 7kg product line.
- Consumer engagement in 300 000 LSM 4-7 households.
- 12 690 competition SMS entries received
- Interaction with over 500 000 Face Book followers



Informal trade

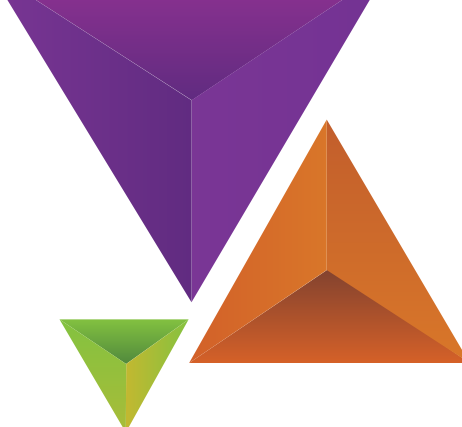
The informal sector continues to be an untapped treasure trove of enormous business opportunities for the industry. The black middle class is growing in leaps and bounds, and reported to have more spending power than ever before.

Potatoes South Africa in its efforts to capture the attention of this market designed an informal sector campaign which ran from 9 to 30 June 2015. The 2014/5 campaign targeted Joburg, Tshwane and Durban fresh produce markets.

The campaign was two pronged in sense that it had a pull strategy aimed at end consumers who were lured at busy intersections such as taxi ranks, train stations and informal trade stalls within targeted townships.



Advisors conducted visits to the major informal trading areas in townships where information was given out about potato storage, product quality and handling, food safety and marketing skills.



RADIO CAMPAIGN

To fortify our informal trade campaigns and also to stimulate demand for potatoes during a time in which potato prices were plummeting, the following radio campaign was developed to run on from 22 June to 6 July 2015:

Station	Listenership on chosen time slots	Time slot	Language
Ukhozi FM	3 000 000	9H00 - 12H00	Zulu
Thobela FM	1 800 000	9H00 - 12H00	North Sotho
Lesedi FM	844 000	9H00 - 12H00	SeSotho
RSG	43 000	9H00 - 12H00	Afrikaans

Total reach of consumers across various LSM groups and geographic spread was 5.7 million radio listeners. The campaign required for listeners to buy a bag of potatoes, SMS the barcode to a short-dial number and stand in line to win a share of R20 000. The campaign had a clear call to action that required radio listeners to visit the consumer website page: www.potatoes.co.za to be able to enter the competition. If google stats and analytics are anything to go by, we can say the campaign was a resounding success!

RURAL MARKETING



A first for Potatoes South Africa and project with all the hallmarks of determination to penetrate growing consumer segments, was the rural marketing project. The project was born out a need to make potatoes the heart of every South African meal, particularly in rural South African regions where other competing products are enjoying uncontested success.

Potatoes South Africa in partnership national renowned chef, Anne Montali developed proudly South African dishes that find inspiration from the rich Xhosa, Zulu, Pedi and Sotho cultures. The recipes were given a twist in order to showcase potatoes as the hero of all meals.

The aim of this project is to get rural South African dwellers recognising that potatoes can be a perfect replacement for other popular starch products. The recipes were used in the production of a recipe brochure which was translated into the four languages.

In addition, branded plastic bags were produced. Both the bags and recipe leaflets will be distributed to all Potatoes South Africa regional personnel, who will deliver them to producers involved with informal trade selling. The informal traders will be given the bags and leaflets for free to use as a marketing tool when selling to their customers. For every purchase of potatoes, they can give out the recipe leaflet for free to their consumers. This way, consumers can have a broadened view on the

many ways in which potatoes can be prepared and consumed. Below is a picture of the branded potato bags.



DIRECT MARKETING - Year round project that ended on 30 June 2015



Potatoes South Africa uses social media platforms to directly engage with various audiences. Potatoes South Africa is on Facebook, Twitter, Instagram and YouTube. In the January/February edition of Chips there is an article on why we partake in social media campaigns and the value thereof.

One of the ways in which Potatoes South Africa is able to benefit from social media is by building consumer intelligence whilst stimulating demand for potatoes at the same time. In response to the plummeting potato prices in the months of May and June PSA developed a short-term sales drive campaign on Facebook where followers were

asked to buy a bag of potatoes, post a photo of their potato purchase and tag three of their friends. The campaign saw the following of Potatoes South Africa’s Facebook page grow from just over 30 000 to over 40 000 followers / page fans in one week.

ADVERTORIAL PROJECT - Year round project that ended on 30 June 2015



Potatoes South Africa strategically chose a combination of magazines and newspapers for generic product promotions advertising. The print mediums chosen have a national footprint and represents the varying demographic and psychographic segments of the consumer market. It is estimated that over 10 million readers were reached through our top of mind and catchy slogan for 2014/5: **Don't Just See the Potato...SEE THE POTENTIAL!**

CONSUMER WEBSITE

Our consumer website is up, running and looking good with the latest potato recipes, health information and general potato information. Please go to www.potatonation.co.za to check out the website.

SPORTS/HEALTH/LIFESTYLE

Potatoes South Africa took part in the Two Oceans, Comrades Marathon as well as Good Food and Wine Show. At all the events a registered dietician and chef were present to make sure the nutritional benefits communicated are backed up by fact and expert advice and to showcase the many ways potatoes can be prepared and consumed. The joint reach in all three events is estimated to be just over 70 000 sports fanatics as well as foodies. They say a picture says a thousand words. We say pictures in motion say what words fail to explain. It is in this spirit that we recorded the events just to provide a snippet of the efficacy of our involvement in these events.

COMRADES MARATHON EXPO 2015, Durban, 28-30 May 2015



IN CONCLUSION

The 2014/5 year was a good year. We have continued to fortify potatoes as fresh, versatile and nutrient dense product that should be at the heart of every South African meal. Through a carefully crafted press release during the country's 2015 State of the Nation Address (SONA), we sent out a State of the Industry Address which unpacked the potential of potatoes to employ between 60-80 thousand permanent and temporal farm workers. When people were celebrating and observing Human Rights Day on 21 March 2015, we were able, through our social media platforms to get South Africans to also observe the "Potato Bill of Rights" tabled as:

All people residing in the Republic of South Africa have:

- The right to eat potatoes on a regular basis as a starch and vegetable
- The right to store potatoes in a dark, cool and dry place
- The right to access accurate and correct information about the nutritional benefits of potatoes
- The right to consume potatoes in many ways without fear or intimidation by new diets

On 28 May 2015, a day on which world hunger was observed, Potatoes South Africa was able to unpack the potential of potatoes to fight hunger and poverty.

RSA Market Agents, Cape Town Market, and McCain joined Potatoes South Africa in the **#BustHungerChallenge** to showcase potatoes as a food secure product that should be at the heart of every South African meal. We carried out a radio campaign with a national footprint that saw PSA being inundated with calls, e-mail and online queries about how to enter and where to buy potatoes.

The 2014/15 year under review rang the bell on a decade of market development and product promotion. Over the past ten years much has been learned, improved and that there is potential to improve market development and product promotion even further.



TRANSFORMATION

Potatoes South Africa has for a number of years been involved in transformation projects and progress is becoming more and more visible. The number of hectares of potatoes planted by black farmers supported by Potatoes South Africa is on the rise and there are farmers who have already been identified as having the potential to farm commercially.

The activities of the Department: Transformation is overseen by the Transformation Committee. In respect of 2014/15 the composition of the Transformation Committee was as follows:

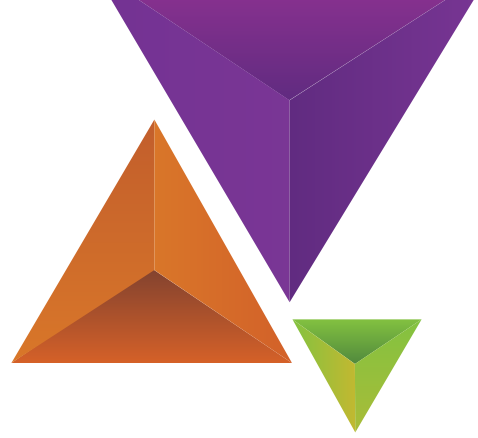
Group	Member	Designated by
Potatoes South Africa Board member	Ms N Mokose (Chairperson)	Board / Nasional Council
Two commercial producer representatives (table and seed)	Mr G A Vorster Mr G Hill	Board / Nasional Council
Four producers from the Enterprise Development Program	Mr L B Khumalo Mr S Vikilahle Mr W Maseka Mr S Mabuza	Development Farmers' Sub-committee
Department of Agriculture, Forestry and Fisheries	Mr S Manthata	Department of Agriculture, Forestry and Fisheries
National Agricultural Marketing Council	Mr Z Xalisa	National Agricultural Marketing Council
Processors	Mr A G Selokane Mr J Engelbrecht	Simba McCain Foods SA
IMASA	Mr D van Zyl	IMASA
SAUFM	Vacant	SAUFM
Meganisation	Mr L Brandt	John Deere

During the year under review, Potatoes South Africa focussed on the following projects in respect of transformation:

- Enterprise development
- Small grower development program
- Tertiary skills pipeline
- Farm based training
- Western Cape Commodity Projects Allocation Committee (CPAC)

ENTERPRISE DEVELOPMENT

Potatoes South Africa continued with its enterprise development programme that is aimed at targeting black farmers by assisting them to set up viable potato producing enterprises. This was the fifth year that the enterprise development was implemented.



The objectives of this programme are to:

- Develop a program that is aimed at sustainable potato production by small holder farmers in order to utilise available land and assist to the maximum benefit of an integrated production system.
- Develop small holder farmers to grow and produce commercially in a sustainable way.

During the year under review, the board approved the expansion of support to those existing farmers on the program who have shown potential and commitment to eventually become a successful commercial potato producer. The objective of the expansion is to increase the production capacity of these farmers in line with the Government's targets.

The identification of farmers for expansion were based on the following:

- Have shown potential and commitment.
- Has access to more land.

These farmers will increase production and remain on the program for an additional four years.



The following farmers participated in the Enterprise Development during 2014/15:

Name	Region	Hectares	Cultivars
Andile Buthelezi	KwaZulu-Natal	9	Mondial and Sifra
Zama Goba	KwaZulu-Natal	8	Sifra
Lucky Khumalo	KwaZulu-Natal	7	Mondial
Noleen Loitering	Eastern Cape	3	BP1, Mondial and Sifra
Siseko Vikilahle	Eastern Cape	8	Sifra
Harold Mateza	Eastern Cape	7	Sifra
Vuyani Kama	Eastern Cape	8	Mondial
Gamandile Gabada	Eastern Cape	3	Mondial
Shadrack Mabuza	KwaZulu-Natal	5	Mondial and Sifra
Moses Sithebe	KwaZulu-Natal	5	Mondial
Mandla Radebe	KwaZulu-Natal	3	Mondial
Buyisile Shangase	KwaZulu-Natal	3	Mondial
Nokulunga Vilakaze	KwaZulu-Natal	3	mondial
Nelly Sokupa	Eastern Cape	4	Mondial
Jethro Ngcobo	KwaZulu-Natal	2	Mondial
David Phike	Free State	5	Mondial
Jeff Kola	Free State	5	Mondial
Willy Maseka	Limpopo	4	Mondial
Phopi Ralejana	Limpopo	5	Mondial
Edward Motibane	Limpopo	4	Mondial
Gaabo Mooka	Limpopo	5	Mondial
Emelda Maklaar	Free State	5	Mondial
Manie Broodie	Free State	5	Mondial
Moses Modukanele	Free State	5	Mondial
Josias Hadebe	Free State	5	Mondial
Albert Dlamini	Free State	5	Mondial
Aaron Tshabalala	Free State	5	Mondial
Gift Mafuleka	Gauteng	10	Mondial
Edmond Ratjomane	Limpopo	5	Mondial
Aubrey Ratjomane	Limpopo	5	Mondial
Albert Ralekhetla	Free State	5	Mondial



As part of the Enterprise Development Programme farmers participating in the programme are exposed to various disciplines in the potato industry to broaden their knowledge of potato production. During the year under review seven of these farmers were taken on an two-day educational tour to institutions such as the Tshwane Fresh Produce Market, the processing plant of McCain Foods, Potatoes South Africa’s head office, the Agricultural Research Council and the farms of successful black potato producers in Limpopo Province.

The main focal points of the visit to Potatoes South Africa’s head office were to provide the farmers with information on the composition of the potato industry, the marketing of potatoes, the value of Potatoes South Africa’s core businesses, transformation in the potato industry and the certification of seed potatoes.

SMALL GROWER DEVELOPMENT PROGRAM

The small grower development program involves farmers who plant potatoes mainly for food security with the remaining crop sold to the immediate community. The aim is to give farmers practical training on proper potato production, harvesting and marketing. This is done through the planting of demonstration trials in the different identified areas. An amount of R234 000 was spent towards small grower development in the KwaZulu-Natal, the Eastern Cape and the Western Cape areas. The small grower development program receives a lot of support from the provincial Departments of Agriculture in these areas. Eleven projects were supported during the year under review and each information day was attended by an average of 50 people making the number of beneficiaries to be in excess of 700.

Projects Funded during the 2014/2015:

PROJECT NAME	Ha	CULTIVAR PLANTED
Jozini	0.15	Mondial 10 Sifra 5
Port Edward	0.15	Mondial 10 Sifra 5
Applesbosch	0.15	Mondial 10 Sifra 5
Wartburg	0.14	Mondial 10 Sifra 5
Weenen	0.12	Mondial 10 Sifra 5
Harding	0.11	Mondial 10 Sifra 5
Weenen	0.2	Mondial
Wupperthal	0.5	Avalanche
Stutterheim	0.7	Sifra
Applesbosch school project	1 bag	Mondial
Wartburg School project	1 bag	Mondial

The information day held on at the Kei Fresh Produce Market at Mthatha on 18 March 2015 is but one example of such a day which was attended by close to 150 farmers, including some farmers on Potatoes South Africa’s enterprise development program. The day was also attended by representatives from the O.R. Tambo district mayoral office, members from the provincial Department of Agriculture and Rural Development and members from the Amathole District which creates a platform for improved cooperation with local role players.



TERTIARY SKILLS PIPELINE

The Potato Industry Development Trust annually awards bursaries to deserving students studying towards an agricultural related qualification with the emphasis on the 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 identifying of the post graduate students.

During 2014/2015, the 20 bursaries were awarded to students at different institutions throughout South Africa.

STUDENT	INSTITUTION	FIELD OF STUDY
Agreement Malebe	University of Limpopo	BSc Plant Production (2nd year)
Phuti Fisha	University of Limpopo	BSc Agri Soil science (2nd year)
Loyola Gauzela	University of Zululand	Bsc Botany and Zoology (2nd year)
Mhlengi Khambule	University of Zululand	BSc Agri Agronomy (2nd year)
Xola Ngceni	University of Forte Hare	BSc Agri Crop Production (2nd year)
Mholi Khumalo	Cape Peninsula University of Technology	Agri Diploma (2nd year)
Dimakatso Moila	Potchestroom College	Diploma in Mixed Farming (2nd year)
Ndzudzeni Madia	Potchestroom College	Diploma in Agriculture (2nd year)
Tshegofatso Ratlhagane	Lowveld College	Plant Production(3rd year)
Present Gininda	North West University	Agricultural economics (MSc)
Tshepo Shalang	Lowveld College	Plant Production (3rd year)
Hloniphile Masuku	University of Mpumalanga	Dip Plant Production (2nd year)
Lutendo Mazibuko	University of Free State	Agro Meteorology (MSc)
Theunis Smit	University of Pretoria	MSc Agri Agronomy (MSc)
Stefan Priem	University of Pretoria	Microbiology (MSc)
Innocent Mazibuko	TUT	Mtech Agriculture
Sonto Mkhabela	University of Limpopo	Reduction of Post Harvest Decay (MSc)
Wavhuthu Ndou	University of Limpopo	Agronomy (MSc)
Nqaba Nongqwenga	University of KZN	Soil Science (Phd2)
Bhekisisa Nxumalo	University of KZN	B Agriculture(2nd year)

To provide these students with some insight into the potato industry they were taken on an induction tour that included visits to:

- The Tshwane Fresh Produce Market where they were given an insight into the workings of a fresh produce market as well as why and how potatoes were inspected and graded by Prokon.
- Potato House. The visit to Potato House included presentations by Potatoes South Africa's core business managers on the projects managed by them and a presentation by the technical manager of Potato Certification Service on the importance of certifying seed potatoes and planting it.
- The Agricultural Research Council's research facility at Roodeplaat, outside Pretoria. The crux of the visit was a presentation on the breeding of new potato varieties and the work done by the in vitro genebank to ensure a pool of authentic and disease free mother material.
- Ede Farming on the Mpumalanga Highveld for a field experience in potato harvesting, washing, sorting and packing.
- Plantovita for a presentation on the unique and valuable role played by the laboratories to test planting material submitted for certification purposes.

During the year under review the personnel of Potatoes South Africa's Department: Transformation once again participated in the Career Fairs at the Universities of Stellenbosch and Pretoria which were hosted by Produce Marketing Association. The potato stand has been growing in terms of the visitors and unlike before where every student was interested in the display, it has shifted to students spending more time at the stand asking relevant questions on how they should shape their careers or studies in order to work within the potato industry.

Potatoes South Africa took this opportunity to interact with the students and provided information on the bursaries available and also the selection criteria that is used to select new students. A lot of students from the previously disadvantaged areas were also interested in the opportunities available as they want to become potato producers themselves due to the availability of land back home. This presented an opportunity to speak about the other transformation program such as the enterprise development program which the Transformation division is currently engaged in.

INTERNSHIP AND WORKPLACE EXPERIENCE

The internship programme is primarily aimed at providing experiential training opportunities to bursary recipients whose study disciplines 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. An amount of R378 000 was set aside for the internship and workplace experience programme.

FARM BASED TRAINING

This year, funds amounting to R234 000 was set aside for training purposes to meet the skills shortages of all the Enterprise Development farmers. A skills audit was conducted amongst the enterprise development farmers and it clearly outlined what skills shortages need to be attended to. During the new financial year, training targeted at all the enterprise development farmers will be rolled out based on the recommendations received.

WESTERN CAPE COMMODITY PROJECTS ALLOCATION COMMITTEE (CPAC)

Potatoes South Africa has been involved with the Western Cape's project allocation committee. The aim of this committee is to disburse the Government funds to vegetable projects that are BEE compliant. The Western Cape Department of Agriculture made available an amount of R10.5 million to the vegetable CPAC and all the funds were distributed to the eight projects that applied and met the criteria including two potato projects, i.e. the Welbeloon project in the Sandveld and the Langvyde project in the Koue Bokkeveld.



INDUSTRY SERVICES

Potatoes South Africa’s Division: Industry Services is responsible for providing a comprehensive regional-based service to potato producers. The department not only serves as the link for two-way communication between potato producers and Potatoes South Africa, but also functions as an extension of Potatoes South Africa’s core business units.

The six regional offices which are strategically placed provided the relevant services to the 16 production regions as set out in the table hereunder.

Farm visits	587
Market visits	39
IRD visits	45
Meetings held	99
Meetings’ attendance figure	2174

REGIONAL SERVICES

During the period under review, the regional offices were responsible for establishing and maintaining the necessary structures and platforms at regional level.

These include all meetings of the regional and sub-regional managements and potato workgroups, as well as farmer days, information days and research days, which serve as platforms for potato producers and other role players to meet, discuss matters of common interest, share information and to take decisions on matters of regional and national importance. A total of 99 meetings and such days were held.

The regional personnel serve as an extension of Potatoes South Africa’s core businesses in terms of executing the core business-related activities in the potato production regions with the emphasis on communication and technology transfer. In addition to producer meetings, personal visits to producers are an important part of the service delivery by regional personnel members. Meetings with producers not only provide the opportunity to verify the accuracy of production statistics, but also allow for:

- Conveying information on production and marketing trends, used by producers in the planning of their planting, harvesting and marketing strategies.
- Providing technical support, regarding matters such as problems relating to pests and diseases.
- Feedback on the core business and general activities of Potatoes South Africa.
- Identifying producers’ needs in terms of regional and national affairs, with a view to refer such matters to the regional management committees and, if necessary, to the Potatoes South Africa board of directors.

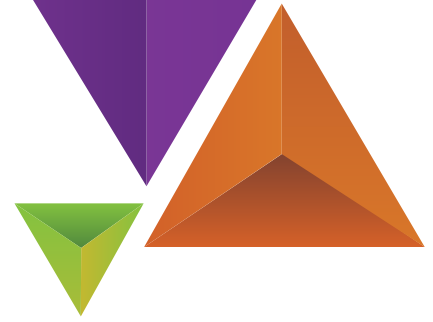
In addition to the 587 producer visits paid during the period under review, specialised support services were provided to 54 potato producers.

CORE BUSINESS SUPPORT SERVICE

Industry information

With regard to industry information, regional personnel are responsible for gathering production statistics in the various

production regions for inclusion in the phase reports. This information is converted into business intelligence and conveyed to the industry in the form of market trends, such as fortnightly crop estimates and monthly newsletters, which contribute towards a sustainable farming environment. Crop estimates were of a high standard and deviations were consequently minimal.



Market development and product promotion

A key function of the regional personnel is visits to and interaction with the national fresh produce markets, private markets, wholesalers, pre-packers, retailers and the processors within their respective production regions.

Market visits

During the year under review 39 market visits were paid. On these occasions the following matters were addressed:

- Communicating production and marketing trends.
- Resolving complaints and problems.
- Monitoring the quality of producers' products.
- Conducting quality and stock control, if necessary.
- Monitoring the general condition and neatness of markets and discussing it with markets agents and management.

Refocus on liaison with the national fresh produce markets

The aim is to liaise with market authorities and agents on a regular basis in order to address production and marketing matters and the needs of producers.

Market floors were visited to:

- Conduct audits in conjunction with market authorities.
- Monitor supply movements, sales and price setting in conjunction with market authorities.
- Ensure that potatoes deemed unfit for human consumption, were handled in accordance with the prescribed regulations and procedures.
- Ensure that potatoes lost due to theft and other losses are handled in accordance with the appropriate market system regulations.
- Ensure that producers' queries in respect of the above matters are addressed in a professional manner, in conjunction with market authorities and market agents.

Visits to processors

Regular visits were paid to potato processors in order to address product and cultivar requirements, demand, quality issues and processing trends.

Visits to wholesalers, retailers and pre-packers

Wholesalers, retailers and pre-packers were visited to determine the supply from the respective production regions and monitor the different packing methods, consumer needs and trends.

Agricultural shows, promotional days, etc.

The regional offices were closely involved in product promotion through agricultural shows, promotional days, media articles and media liaison, as well as via liaison with various partners in the potato value chain. Events included the Vivo Farmers' Day, the Sandveld Media Day, the Eastern Free State Information Day, the Comrades Marathon and the Ceres Soccer Tournament. A publicity article on potato production in the Sandveld was also published in Landbouurger.



Research and development

With regard to research and development, regional personnel are key players in especially the effective functioning of the potato workgroups.

Potato workgroups

During the period under review, 46 trials were conducted by 13 potato workgroups. In addition, six green tours/research days took place, at which the trials and resulting data were explained to producers. The results of the trials were also presented during Potatoes South Africa's Research Symposium.

Mechanical damage identification

The identification of areas in the pack store where mechanical damage occur, was continued with. This was done by using impact recording devices. A further two devices were purchased during the period under review to provide in the demand for the service during harvesting seasons of the different production regions. Recordings were conducted in 45 pack stores, representing approximately 15 200 hectares. In most instances, it was possible to identify the problem areas and recommend solutions.

Transformation

The Department: Industry Services plays an important role in the success of transformation as a core business of Potatoes South Africa. At regional level, regional managers and officers managed the various activities that form part of comprehensive transformation program executed on a national level.



Enterprise development program

The projects in the program vary between three and ten hectares in size. There are currently 31 small-scale black farmer projects and farmers are supplied with certified seed potatoes for a period of four years. Potatoes South Africa's regional personnel work closely with the mentors who were appointed to manage the projects to contribute to the success thereof.

Small holder development program

This program comprises small projects of about 0.2 hectares each. These social projects attract a great deal of attention and generate support for the people in the rural areas of Kwazulu-Natal and the Eastern Cape.

The regional personnel of Potatoes South Africa based in these areas main involvement with the projects is aimed at providing support to these projects in terms of sourcing inputs, as well as providing information on the planting, harvesting and marketing of potatoes. This is done in conjunction with the appointed mentors, departmental extension officers and input providers. A number of information days were held to coincide with the planting and harvesting of the potatoes.

Farm worker training

The organisation and coordination of farm worker training constitute an important aspect of transformation involving regional staff members. In 2014/15 a total of 145 farm workers in the various regions underwent training. The need for this service continues to grow with first aid and health and safety becoming increasingly

important. Consequently potato producers endeavour to provide related training that not only is conducive to the safety of the farm workers, but to improve work performance as well.

Administration

Regional managers and officers dedicated 34% of their time to administrative matters during the period under review. Such matters included:

- Organising meetings and speakers, as well as compiling agendas and minutes.
- Processing production data with a view to compiling crop estimates and phase reports.
- Compiling and distributing newsletters and information articles.
- Compiling monthly reports as a means of improving both internal communication and the coordination of activities.
- Budget control.
- The administration related to the resolution of complaints and problems.
- General administration processes, such as responding to telephonic enquiries and requests, scheduling appointments and fostering good relations with role players.



POTATO CERTIFICATION SERVICE

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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



CHAIRPERSON'S REPORT



GERHARD POSTHUMUS

CHAIRPERSON

Potato Certification Service has been contracted by the Independent Certification Council for Seed Potatoes to act as agent in respect of the application of the South African Seed Potato Certification Scheme. The Independent Certification Council for Seed Potatoes, in turn, was appointed by the Minister of

Agriculture, Forestry and Fisheries as the authority.

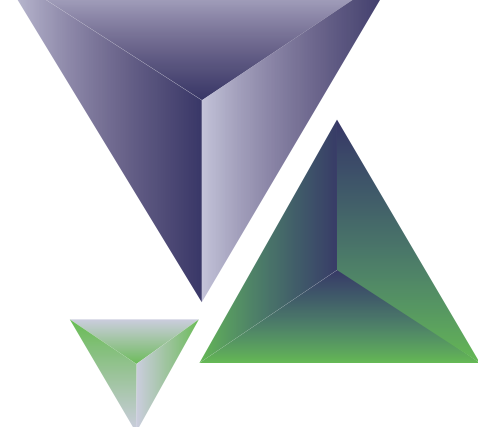
As Potato Certification Service is a non-profit company in terms of the Companies Act, No 71 of 2008, it is managed on a zero profit base. The company derives its income from a tariff per hectare paid by the

seed potato grower with registration. We rely on the surveys done by the Potato Certification Service officials to compile a budget for the ensuing financial year. The accuracy of these surveys as well as the commitment of the seed potato growers play the largest role in the eventual income of the business. Unfortunately the drastic fluctuations in seed potato plantings in South Africa the past three years, made it somewhat difficult to manage the company.

As a service provider to the entire potato industry in South Africa, it is imperative that we retain our expertise and have fewer staff leaving our service. We, as the board and management of Potato Certification Service, seek actively to increase the pool and extent of industry knowledge in our business in order to provide a better service to the customer. It therefore gives me great pleasure to report that two of Potato Certification Service's staff members are back with us after having made a run outside the company. Skilled staff within Potato Certification Service is and will always remain our biggest and best asset.

The other big asset is of course our South African Seed Potato Certification Scheme. This Scheme is one of two on the African continent. The other one is in Kenya and with only 2% certified seed being planted, it struggles to exist.

It is of cardinal importance that cognisance be taken of the



important role the Scheme plays to assist in ensuring the sustainability and viability of the South African potato industry. The Scheme not only takes the lead in terms of quality (44 tons per hectare on average), but also ensures the establishment of a sound structure through which South Africa has access to world genetics. The Scheme is an asset to the total

South African potato industry which should be looked after.

I wish to thank my fellow directors of Potato Certification Service for their commitment, time and positive inputs. To the staff, thank you for your expertise and dedication that enable us as a company to certify a product of world standard. A special word

of thanks to our Managing Director, Ms Sanette Thiar, - her dedication, positive attitude and work ethics are outstanding and Potato Certification Service is fortunate to have a leader of her calibre.

Gerhard Posthumus
Chairperson



“It is of cardinal importance that cognisance be taken of the important role the scheme plays to assist in ensuring the sustainability and viability of the South African potato industry.”





MANAGING DIRECTOR'S REPORT



SANETTE THIART

MANAGING DIRECTOR

2014/2015 was certainly one of the toughest years in certification with the outbreak of bacterial wilt that uninvitedly knocked on some growers' doors. The late Mr Nelson Mandela said: "Do not judge me by my successes, judge me by how many times I fell down and got back up again." It is easy to look good

when things are going well. True character is shown in difficult times and how one gets up and continues from there.

Leading seed potato growers, who have previously been winners of the Seed Potato Grower of the Year award, or have been amongst the

Top Ten seed potato growers, fell victim to bacterial wilt this year. There was tremendous pressure on all the systems in the potato industry during this outbreak. For the first time the Department of Agriculture, Forestry and Fisheries issued orders in order to combat the organism and Potato Certification Service has revoked the certification of those seed potatoes suspected of being infected. Emotions ran high and many questions were asked. The reality is that the South African Seed Potato Certification Scheme, as far as bacterial wilt is concerned, follows of the strictest, if not the strictest processes to ensure as far as possible that certified seed potatoes are free from bacterial wilt. Our international counterparts in certification went so far as to say: "You have gone beyond the call of duty to ensure that the material is free from *Ralstonia solanacearum*." It is heartening to report that all these seed potato growers did everything in their power to combat the organism and will continue to do so. Circumstances were not always easy, but they continue to register seed potato plantings and do everything right to manage the risk. Great thanks and appreciation are extended to the staff of Potato Certification Service, Potato Laboratory Services and Potatoes South Africa, who provided input and advice and assistance to the growers. The Department of Agriculture, Forestry and Fisheries has played a major role in raising awareness regarding R.110 under

the Agricultural Pests Act, 1983 (Act No 36 of 1983). Thank you for the entire team at the department, led by Ms Salamina Maelane, who had to deal with this sensitive issue. Much has been learnt and I believe we will all emerge stronger and more aware from this process.

Company

Potato Certification Service is contracted as a service provider for the certification of seed potatoes by the Independent Certification Council for Seed Potatoes, the latter being appointed as the authority by the Minister of Agriculture, Forestry and Fisheries. Potato Certification Service has been audited by the Department of Agriculture, Forestry and Fisheries on several occasions in order to ensure that the work is executed correctly.

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

Furthermore, it is satisfying to report that Potato Certification Service has Level 5 B-BBEE status and is recognised as a value-adding service provider.

Board of directors

The Board had only one resignation in the last year as Mr Van der Spuy Botes indicated that his term is coming to an end. He served on the Board since 15 January 2001 and was the chairperson of the National Seed Potato Committee from 2006 to 2009. He is thanked for the calm manner in which he made his contribution to meetings.

He always made sure that everyone understood exactly before a given point was finalised. He also had a special interest in everyone's ups and downs. Van der Spuy, thank you for your outstanding contribution over nearly 15 years.

The North Eastern Cape qualifies in terms of the criteria for representation on the National Seed Potato Committee and therefore also for representation on the board of Potato Certification Service. The latter's Memorandum of Incorporation, however, only provides for nine directors, which will be exceeded by the appointment of another director. The Board has therefore decided to provide for 13 directors, but this process is postponed until after the approval of Potatoes South Africa's structure as Potato Certification Service's structures are based on the foundation of the aforementioned.

The directors participated in an evaluation process in June 2015, which will be used to expand the team's knowledge and to provide an even better service to the seed potato industry.

Mr Gerhard Posthumus was appointed as Chairperson of the board with Mr Llewellyn de Kock as Vice-chairperson. The Executive Committee consists of the Chairperson, Vice-chairperson and Managing Director. The Executive Committee operates under Mr Posthumus' capable hands. A particular word of thanks to you for good, responsible decisions taken. It is great to have someone in charge who understand and know the big picture of the potato industry.

Members of the company

The members of the company is seen as all the active seed growers – in

other words, all the growers who, for the past four years, registered plantings for the certification of seed potatoes under the South African Seed Potato Certification Scheme. Currently there are 167 active seed growers, of whom 107 have registered plantings for the 2014/15 financial year. During the same period, seven new growers joined the seed potato industry. Of concern is the fact that the number of growers considered to be active have declined by 51 compared to the previous year.

Staff

Potato Certification Service had two resignations during the year under review. Mr Marius Uys, acting regional manager at Piketberg and Mr Riaan Cronjé, trainee certification official at Christiana left the company at the end of September 2014.

Approval has been granted for the appointment of Mr Dániel Möller as regional manager at Piketberg. He has worked for Potato Certification Service previously before joining Potatoes South Africa for a while. His re-appointment brought huge relief on service delivery as all the certification officials already had to assist in other regions due to the shortage of fully qualified certification officials. Mr Johandré Breitenbach joined Potato Certification Service in December



“The reality is that the South African Seed Potato Certification Scheme, as far as bacterial wilt is concerned, follows of the strictest, if not the strictest processes to ensure as far as possible that certified seed potatoes are free from bacterial wilt.”

2014 and Mr Johan Germishuys in January 2015. Both have been appointed at Christiana. The new appointees are making good progress with their training and I trust that they will be very happy in their positions with the company.

Potato Certification Service is committed to accommodate transformation students who need practical training to obtain their degree or who need workplace experience. Mr Mukhethwa Mutele was a workplace experience student



at Christiana where he was exposed to all aspects of certification. He has already obtained his Diploma in Agriculture (Mixed Farming) at the Potchefstroom Agricultural College and left Potato Certification Service's employ at the end of September 2014.

Mr Renier Viviers was an internship student placed at Piketberg and assisted at Christiana from time to time with sampling to which he was authorized. Upon obtaining his Diploma in Agricultural Management,

he was appointed as trainee certification official at Christiana. Much appreciation is expressed towards all the certification staff, but especially to Mr Frank Osler, technical manager, and Mr Jamie Jansen van Vuuren, regional manager at Christiana, who had to coordinate the certification officials to assist in the various regions. Potato Certification Service once again succeeded in delivering services on time and efficiently. Thank you to all the administrative staff without whose support we would not be able to function. You do selfless work behind the scenes and I thank you for it. Your input and support is greatly appreciated.

To all my staff; never underestimate what you do for the potato industry and food security in South Africa.

Finance

The budgeted total income of R15 398 457 in this report year was based on 8 600 hectares to be registered. The actual registered hectares came to 9 677, which was 1 077 hectares more than expected. This resulted in an actual total income of R16 913 788, which is R1 515 331 more than budgeted. The expected expenses (R14 973 388) were exceeded by R807 017 due to the additional hectares that had to be serviced which were not budgeted for. Due to the additional hectares registered, Potato Certification Service was able to end the financial year on a net surplus of R1 133 383 compared to the budgeted surplus of R425 069.

Potato Certification Service is still a going concern that continually strives

to deliver a professional and cost-effective service amidst fluctuating hectares.

Potato House

Potato Certification Service still has a 26% share in Potato House and Potatoes South Africa a 74% share. The building was originally purchased for an amount of R4 124 243, to which Potato Certification Service contributed R1 072 303 by way of a loan. In November 2014, the building was valued at R5 500 000. After some improvements were made the previous year, which included the tiling of the building's floors and renovation of the kitchens, the building is in good condition. The daily maintenance is done by Potato Certification Service on a one-in-four-years basis. In respect of the year under review, it was primarily Potatoes South Africa's responsibility, with Potato Certification Service serving on the Maintenance Committee.

Committees and forums

The committees and forums within the potato industry constitute organised platforms where the majority of communication with growers and other stakeholders in the industry takes place. Aspects that need to be considered are tabled by the Regional Seed Potato Growers' Meetings to the National Seed Potato Committee. The various aspects are then debated and, if it is in the national interest, the committee refers recommendations and resolutions to the relevant bodies and committees involved in the seed potato industry.

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

Region	Budgeted hectares	Actual hectares	Deviation
Douglas	600	716.9	+116.9
Northern Cape	550	665.9	+115.9
Eastern Cape	50	51	+1
Christiana	5 175	5 798.36	+623.36
Western Free State	4 530	4 960.84	+430.84
North West	470	539.43	+69.43
Eastern Free State	175	298.09	+123.09
Pietermaritzburg	1 500	1 761.093	+261.093
KwaZulu-Natal	1 300	1425.37	+125.37
North Eastern Cape	200	335.72	+135.72
Piketberg	800	742.629	-57.371
Sandveld	600	538.129	-61.87
Ceres	110	129	+19
Southern Cape	90	75.5	-14.5
Middelburg	525	657.41	+132.41
Mpumalanga	461	486.41	+25.41
Limpopo	64	171	+107
Total	8 600	*9 676.00	*+1 076.000

* Rounded off



The legal evaluation of the South African Seed Potato Certification Scheme and Protocol received considerable attention and is still in process. All aspects are considered carefully to determine whether it belongs in the Scheme or the Protocol.

On behalf of the company, I thank each committee member for taking the capacity in which he/she represents the seed potato industry serious. Proper preparation and

understanding of issues under discussion is of vital importance for decision making in the best interest of the entire potato industry. Committee members act in the interest of the region or group represented and decisions should be taken in national interest rather than personal or regional interest.

To the respective chairmen, Mr Gerhard Posthumus of the Potato Certification Service's Board, Mr Llewellyn de Kock of the National

Seed Potato Committee and Dr Dave Keetch of the Independent Certification Council for Seed Potatoes, thank you for the time and energy that you devote to the business of Potato Certification Service and the seed potato industry. Your knowledge, input and involvement makes the management of the seed potato industry matters so much easier.



General

Many thanks to the seed potato growers of South Africa who have the guts to produce and certify quality seed potatoes. Gratitude and appreciation go to all the seed potato growers who always do everything right and apply the necessary discipline to certify good quality plant material. It is a privilege to work with you.

I also wish to convey a special

word of thanks to all the companies sponsoring the Seed Potato Growers' Forum so faithfully. Your contribution and support enable us to annually organize a Seed Potato Growers' Forum of note. The networks built and strengthened are to the benefit of the entire potato industry. Again, I thank you for the good relationship we have with you. We trust that your sponsorship brings blessing to your business.

I like to wish you all a very

prosperous 2015/2016 season. I trust that everyone will continue in the midst of great challenges, the current drought to name but one. Despite enormous pressure on the Certification Scheme, I believe that South Africa truly has the best Certification Scheme in the world. The staff of Potato Certification Service believes in what we do and why we do it.

Sanette Thiar
Managing Director



BUSINESS REPORT

Structures

Potato Certification Service is a non-profit company, established in 1995, with a mandate to certify seed potatoes.

Potato Certification Service is contracted by the Independent Certification Council for Seed Potatoes to manage and administer the South African Seed Potato Certification Scheme. The Scheme was promulgated in terms of the Plant Improvement Act, 1976 (Act No. 53 of 1976).

The purpose of certification is to certify seed potatoes that have a phyto-sanitary status in terms of diseases and pests falling within predetermined norms and that are true to type. The Scheme requires each generation of seed potatoes to comply with specific quality standards. In order to ensure the sustainability of seed potato production in South Africa, the Scheme is based on disease-free material (zero tolerance) as base material.

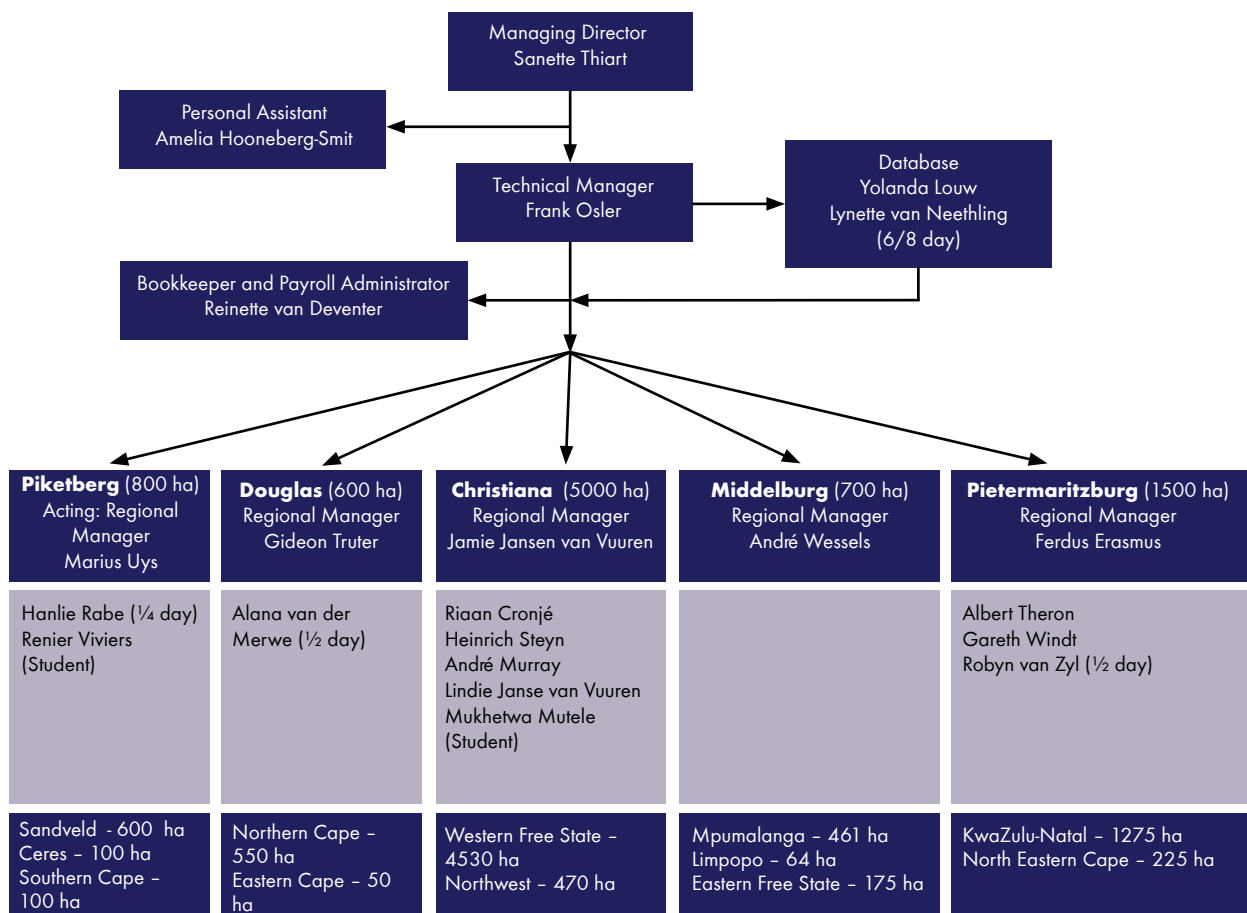


Figure 1: Company Structure as on 1 July 2014

The aim of the application of the rules, as set out by the Scheme, is to minimise the build-up of diseases in seed potatoes and the concomitant building up of diseases in the soil.

Personnel

The company's head office is located in Potato House in Persequor Technopark, Pretoria, with five regional offices located throughout the country, namely in Piketberg, Douglas, Christiana, Middelburg (Mpumalanga) and Pietermaritzburg. The regional offices and staff members were strategically placed in order to render the best possible service in the most affordable manner to growers. The structure of the company during the period under review is reflected in Figure 1.

Board of Directors

The company is managed under the guidance of a board of directors. The directors comprise the chairpersons of the respective seed production regions, as reflected below.

Table 1: Board of Directors

Director	Position	Representative for:
Mr Gerhard Posthumus	Chairperson	Western Free State
Mr Llewellyn de Kock	Vice-chairperson	Ceres
Mr Niekie Visser	Director	Sandveld
Mr JJ van de Velde	Director	KwaZulu-Natal
Mr Van der Spuy Botes	Director	Northern Cape
Mr Jakkie Mellet	Director	Mpumalanga, Limpopo
Mr Frans Engelbrecht	Director	North West
Mr Paul van Niekerk	Director	Eastern Free State
Mr Sanette Thiar	Managing Director	Potato Certification Service

Mr Gerhard Posthumus was appointed Chairperson of the Board, with Mr Llewellyn de Kock as Vice-chairman. The Charter of the Board is reviewed and confirmed annually. The Board has undergone an evaluation process in the year under review. Consideration is given to the amendment of the Memorandum of Incorporation to allow for more directors. This process, however, is placed on hold until Potatoes South Africa's processes have been completed, because the National Seed Potato Committee's structure and therefore Potato Certification Service's Board is based on Potatoes South Africa's regions.

Independent Certification Council for Seed Potatoes

The Independent Certification Council for Seed Potatoes is designated as the Authority by the Minister of Agriculture, Forestry and Fisheries. The Council comprises democratically elected seed potato growers, representative of the respective production areas; two table potato producers appointed by Potatoes South Africa, the Agricultural Research Council, a representative of the Nucleus Material Producers (NUMPRO), the Manager of Potato Laboratory Services and the Managing Director of Potato Certification Service. The Council has an independent chairperson, appointed by the producer members serving on the Council. Representatives of the Department of Agriculture, Forestry and Fisheries attend Council meetings but do not have voting rights. Table 2 below reflects the present composition of the Independent Certification Council for Seed Potatoes.

The seed potato growers are organised in Regional Seed Potato Growers' Meetings which, in turn, have representation on both the Council and the National Seed Potato Committee in terms of the number of hectares registered, the number of bags certified, as well as the number of seed growers per region. During the period under review, Mr Gert Bester, table producer

Table 2: Composition of the Council

Council Member	Position	Representative for:
Dr Dave Keetch	Chairperson	Independent
Mr Gerhard Posthumus	Vice-chairperson	Western Free State
Mr JJ van de Velde	Member	KwaZulu-Natal
Mr Jakkie Mellet	Member	Mpumalanga and Limpopo
Mr Johan Greyling	Member	Western Free State
Mr Van der Spuy Botes	Member	Northern Cape
Mr Niekie Visser	Member	Sandveld
Mr Llewellyn de Kock	Member	Ceres
Mr Frans Engelbrecht	Member	North West
Mr Paul van Niekerk	Member	Eastern Free State
Ms Sanette Thiar	Member	Potato Certification Service
Ms Marieta Botha	Member	Potato Laboratory Services
Dr Diedrich Visser	Member	Agricultural Research Council
Mr Dawie Ras	Member	NUMPRO
Mr Jan van Zyl	Member	Table potato producers
Mr Rudi Heinlein	Member	Table potato producers

appointed by Potatoes South Africa, resigned and was replaced by Mr Jan van Zyl. In order to fully understand Council's role and have sufficient knowledge of the Scheme and the Protocol, all new Council members have to pass an open-book examination, specifically designed to address Council's role in the supply of good quality seed potatoes to the industry.

Dr Dave Keetch, served as independent chairperson, since the establishment of the Independent Certification Council for Seed Potatoes. Dr Keetch has vast experience in agriculture and has made his mark in the seed potato industry. However, he has indicated that this is his last term and Adv Les Kügel was named his successor. Adv Kügel, together with Dr Keetch, will serve for a two year term as chairperson in order for Adv Kügel to get to know the industry. Adv Kügel started his career in the public sector, first as a legal adviser in the then Department of Agriculture and later the head of the legal department in the then Department of Minerals and Energy. He has an excellent understanding of development of legislation, regulations and management of institutional and regulatory frameworks. He is wished success and the best of luck for this important role.

The Council 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 Council's duty to continually evaluate the Scheme in order to introduce amendments in the interest of the potato industry and to oversee the application of the Scheme as specified in the Regulations approved by the Minister of Agriculture, Forestry and Fisheries. It is exactly this evaluation of the Scheme that has received special attention in the last year. The Potato Certification Service management, in collaboration with the Council and a team of legal councillors, is evaluating the Scheme and Protocol in legal terms.

Regional Seed Potato Growers' Meetings

Regional Seed Potato Growers' Meetings 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 of the Regional Seed Potato Growers' Meetings are elected by the growers in the region to serve as the mouthpiece of that specific region and serve on the National Seed Potato Committee, the Independent Certification Council for Seed Potatoes, as well as the Potato Certification Service's Board of Directors.

A seed potato production region shall qualify for one member of the National Seed Potato Committee if the region complies with two of the following criteria: when the region certifies 50 000 x 25 kg units and more in terms of the Scheme for at

least two consecutive years; where the region registers 100 hectares and more for seed potato production in terms of the Scheme for at least two consecutive years; where five and more seed potato growers in the region register for seed potato production in terms of the Scheme for at least two consecutive years.

The North Eastern Cape currently qualifies for representation on the National Seed Potato Committee and therefore also on the Independent Certification Council for Seed Potatoes and the Board of Directors of Potato Certification Service. The process is underway to organize the region and to elect a chairperson.

National Seed Potato Committee

The National Seed Potato Committee is a committee of Potatoes South Africa and considers matters related to the seed potato industry and 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 Independent Certification Council for Seed Potatoes with regard to national requirements in respect of the certification of seed potatoes and proposes amendments to the Scheme. Potato Certification Service is responsible for the administration of the National Seed Potato Committee.

Table 3: National Seed Potato Committee

Committee Member	Position	Representative for:
Mr Llewellyn de Kock	Chairperson	Ceres
Mr Van der Spuy Botes	Vice-chairperson	Northern Cape
Mr JJ van de Velde	Member	KwaZulu-Natal
Mr Gerhard Posthumus	Member	Western Free State
Mr Johan Greyling	Member	Western Free State
Mr Niekie Visser	Member	Sandveld
Mr Jakkie Mellet	Member	Mpumalanga and Limpopo
Mr Frans Engelbrecht	Member	North West
Mr Paul van Niekerk	Member	Eastern Free State
Mr Jan van Zyl	Member	Table producer
Mr Rudi Heinlein	Member	Table producer
Mr Neels Marais	Observer	Seed Potato Traders' Forum

The Chairperson of the Seed Potato Traders' Forum attends the National Seed Potato Committee meetings as an observer, in order to address the interests of seed potato traders.

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 Potatoes South Africa. When a region registers 2 000 hectares and certifies one million x 25 kg bags for two consecutive years, it qualifies to have a second member on the National Seed Potato Committee. When such a region no longer complies with the requirements for two consecutive years, the right to a second committee member falls away. The Western Free State is the only region that currently complies with the criteria for a second member.

Mr Llewellyn de Kock was elected as Chairperson of the National Seed Potato Committee and the Seed Potato Growers' Forum. Mr Van der Spuy Botes serves as Vice-chairperson. The two-year term expires at Potatoes South Africa's Congress and the Seed Potato Growers' Forum in 2015. The two primary table producers have full membership on the National Seed Potato Committee and the Constitution has been amended accordingly.



Seed Potato Growers' Forum

The Seed Potato Growers' 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 Independent Certification Council for Seed Potatoes with regard to amendments to the Scheme;
- referral of resolutions to the respective committees; and
- for the dissemination of information.

As mentioned above Mr Llewellyn de Kock was elected as Chairperson of the Seed Potato Growers' Forum. His two year term expires in 2015. This coincides with the Seed Potato Growers' Forum and the Potatoes South Africa Congress.

The sixteenth annual Seed Potato Growers' Forum was held in Bloemfontein on 9 September 2014. The respective chairpersons of the National Seed Potato Committee, Potato Laboratory Services and the Potato Certification Service's Board of Directors provided feedback on the activities of the past year.

The following topics were presented:

- Extending the term for Plant Breeders' Rights for all potato cultivars from 20 to 30 years – Mr Daan du Plessis.
- The effect of proposed changes to the VAT Act – Dr André Jooste.
- Raising awareness on phyto-sanitary matters and the impact it has on international trade – Mr Ernest Phoku.
- Outcomes of validation process for the implementation and use of PCR-testing in potato certification – Ms Anél Espach.
- Value proposition of industry organisations and structures – Dr John Purchase with panel discussion.
- Seed Potato Growers' Forum: annually or biennially? – Mr Llewellyn de Kock.
- Approval of constitutions regarding the Seed Potato Growers' Forum, National Seed Potato Committee and Independent Certification Council for Seed Potatoes.

Mr JP van den Berg (L017) was awarded the Bayer CropScience Seed Potato Grower of the Year trophy, with Mr Frans Engelbrecht (L002) and Mr Jakkie Mellet from Potato Seed Production (B008) as runners-up.

Seed Potato Certification

During the period under review, 9 834 hectares were registered (planting date), which included 71 hectares registered for mini tuber production. For the past three years, the number of hectares registered for seed production constituted less than 10 000 hectares. During the period under review, the budgeted income was based on 8 600 hectares to be registered, but 9 677 hectares (invoice date) were registered – which was 1 077 hectares more than originally budgeted for.

Table 4 indicates the hectares registered per production region for the planting dates, 1 July until 30 June each year. The hectares in the Sandveld recovered a little since last year, but the Ceres hectares dropped significantly. The hectares in the Northern Cape, Western Free State, North West, Eastern Free State, Limpopo and the North Eastern Cape increased significantly. Mpumalanga, KwaZulu-Natal and the Eastern Cape remained fairly stable.

Table 4: Number of registered hectares in seed potato production areas

Region	2004/ 2005	2005/ 2006	2006/ 2007	2007/ 2008	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014	2014/ 2015
Sandveld	2,505	2,505	2,188	2,094	1,527	1,708	1,150	728	438	481	627
Ceres	256	254	281	303	287	234	245	233	248	160	126
Southern Cape	104	90	97	135	144	97	95	101	106	89	76
Northern Cape	1,065	1,173	1,081	996	790	858	1,129	1,115	630	581	674
Western Free State	2,359	2,913	3,420	3,679	3,719	4,055	4,199	4,535	4,446	4,608	4,961
North West	319	439	366	417	410	620	521	525	461	424	509
Mpumalanga	762	700	628	519	426	423	541	578	443	464	468
Eastern Free State	183	149	166	37	18	144	231	249	234	160	296
Limpopo	45	54	42	42	36	63	143	20	68	90	207
KwaZulu-Natal	1,779	1,778	1,986	1,664	1,524	1,787	1,915	2,016	1,655	1,401	1,432
North Eastern Cape	3	61	46	92	93	172	224	267	186	260	336
Gauteng				14							
Eastern Cape	25	17	27	2	2	6	21	25	83	54	51
South Western Cape											
Total (hectares)	9,407	10,134	10,328	9,994	8,976	10,167	10,415	10,393	8,998	8,772	9,763

The Western Free State currently certifies 43% of the seed potatoes produced in South Africa. Not all the seed potatoes from the hectares registered in the period under review have yet been certified. KwaZulu-Natal is the region that contributes the second largest portion of certified seed potatoes to the industry, followed by North West (see Table 5 below). The production data, as indicated, reflects the actual number of 25 kg bags that were certified on the registered hectares as indicated in Table 4.

Table 5: Certified 25 kg bags of seed potatoes in the respective seed potato production areas (G1 – G8 and Standard Grade)

Region	2004/ 2005	2005/ 2006	2006/ 2007	2007/ 2008	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014	2014/ 2015*
Sandveld	1,078,453	1,175,407	1,080,278	987,511	802,415	796,610	470,504	271,964	175,556	330,734	144,772
Ceres	118,206	201,502	163,959	163,919	91,208	137,162	116,233	134,887	57,819	104,826	36,108
Southern Cape	38,812	57,388	52,933	55,119	63,114	55,689	54,329	48,832	48,483	47,908	60,387
Northern Cape	391,555	437,486	390,493	299,101	218,762	307,653	504,215	505,856	315,802	385,875	448,770
Western Free State	1,268,936	1,715,749	1,696,116	2,054,442	2,245,981	2,338,402	2,208,216	2,288,561	2,321,196	2,963,864	2,884,293
North West	197,597	269,313	287,896	502,014	553,995	551,015	565,071	737,251	793,147	887,115	900,293
Mpumalanga	628,723	355,221	415,149	402,792	245,763	294,841	413,475	446,813	266,069	362,545	375,001
Eastern Free State	31,381	36,187	34,618	18,926	15,947	64,954	88,577	96,909	126,673	119,294	237,293
Limpopo	31,750	38,244	7,647	55,173	16,907	50,735	81,355	16,200	80,405	76,108	78,437
KwaZulu-Natal	1,306,242	1,466,788	1,174,649	1,236,151	1,292,496	1,696,776	1,428,962	1,337,837	1,256,036	1,029,918	1,052,597
North Eastern Cape	1,044	22,180	19,558	40,840	67,746	149,838	145,885	81,251	91,505	182,805	336,952
Gauteng											
Eastern Cape	4,329	8,621		219	437	3,129	9,067	13,104	24,816	20,887	29,538
South Western Cape											
Total (25 kg bags)	5,097,028	5,784,086	5,323,296	5,816,207	5,614,771	6,446,804	6,085,889	5,979,465	5,557,507	6,511,879	6,584,441

*Not complete



The certified yield varied between 5 and 6.5 million bags over the past ten years, as far as Generations 1 to 8 and Standard Grade were concerned (see Table 5 and Figure 2), with the past two years just over 6.5 million bags. The average certified yield per hectare has increased from 13.5 tons per hectare a decade ago to an average of 16.8 tons per hectare in the reporting year. This is the highest ever.

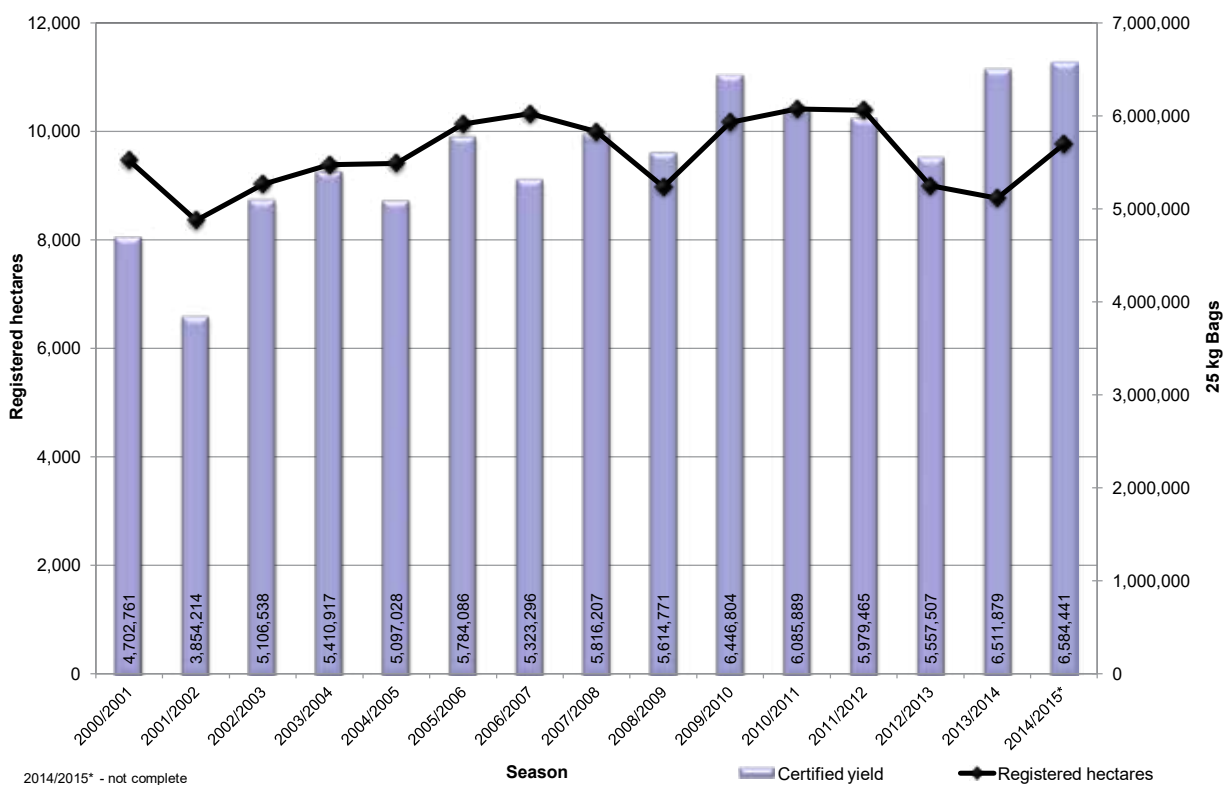


Figure 2: Registered hectares (G0 to G7) and certified yield (G1 to G8 and Standard Grade)

Figure 3 below indicates the number of mini tubers produced on the units registered for the period 1 July to 30 June the next year. All mini tuber plantings registered during 2014/2015 have not yet been harvested – therefore this production figure will still change.

At present, there are eight mini tuber production facilities that are approved by the Independent Certification Council for Seed Potatoes. They are Rascal Seed Research Laboratories, Potato Seed Production, Advanced Potato Propagation, Ceres Aartappels, Wes-Kaap Aartappelsaad, Super Spud Seed Potatoes, Maluti Mini Tubers and Griekwaland-Wes Bpk. These facilities either produce their own *in vitro* plantlets or obtain them from the Agricultural Research Council or Ansabi Mass. The base of disease free material (see Figure 3), as the point of departure, is therefore becoming broader. This is also reflected by the increased number of Generation 1 to Generation 4 seed potatoes certified during the past decade (see Figures 8 and 9).

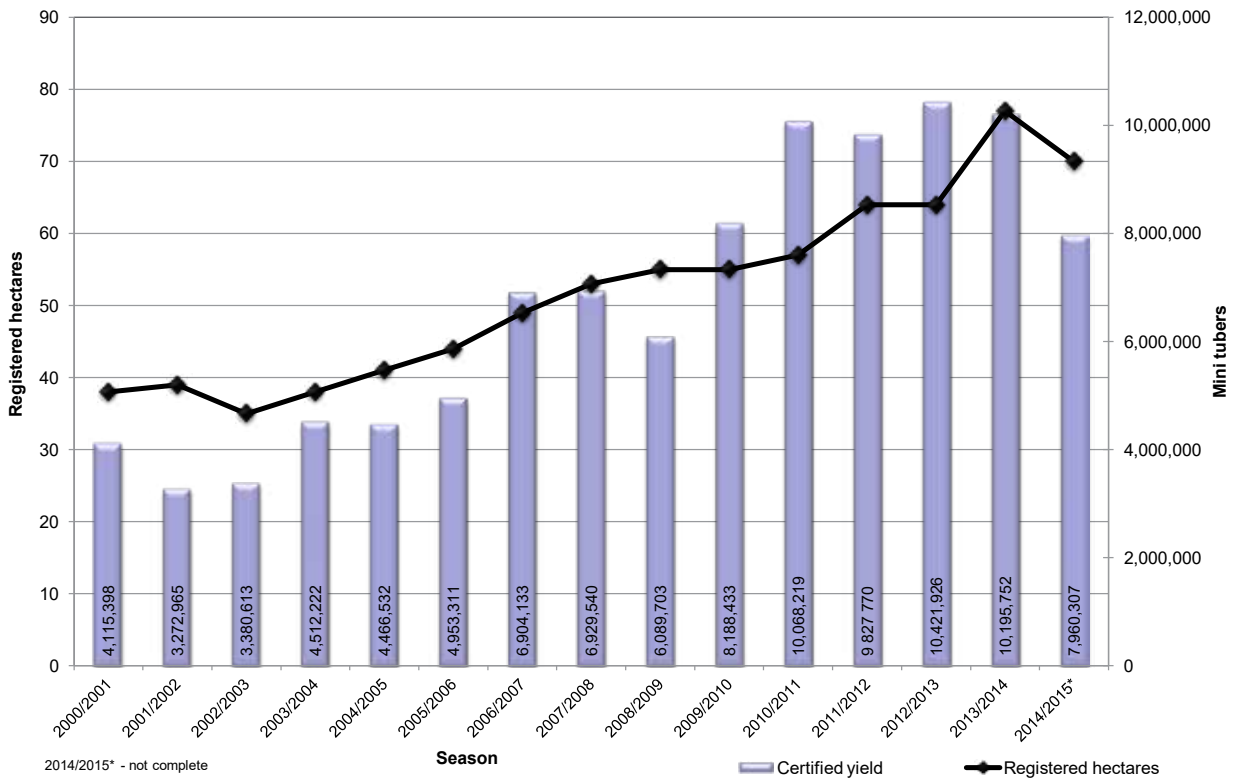


Figure 3: Registered hectares and certified yield for Generation 0 (mini tubers)

If one looks at the cultivar distribution of the top ten varieties that were certified during the past ten years, as reflected in Figures 4 and 5 below, it is clear that tremendous changes took place. The number of 25 kg bags of BP1 certified decreased from 27.3% in 2004/2005 to 2.22% in 2014/2015, i.e. the period under review.

Mondial’s position has decreased slightly from 38.44% last year to 32.7% in 2014/2015. Sifra did not feature at all ten years ago but now it accounts for 18.39% of all seed potatoes certified. Lanorma is currently the third biggest potato cultivar certified in the year under review, with 6.75% of all seed potatoes certified.

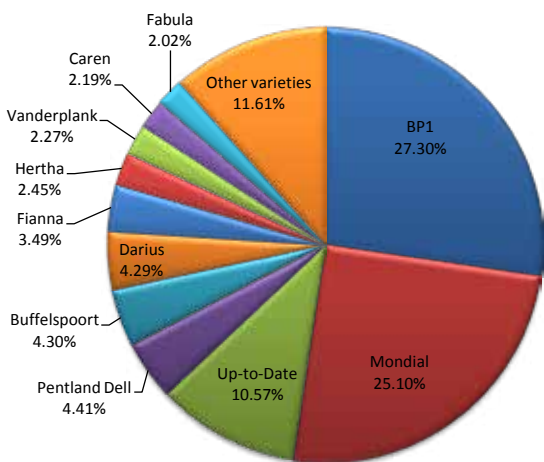


Figure 4: Cultivar distribution as in 2004/2005

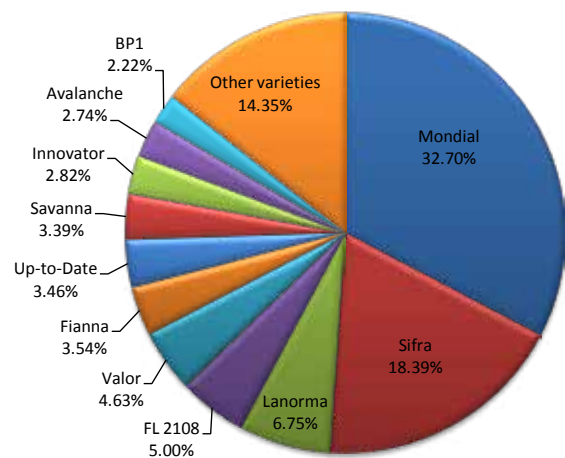


Figure 5: Cultivar distribution as in 2014/2015*



The other smaller varieties planted are indicated in Figure 6 (2004/2005) and Figure 7 (2014/2015*). Ten years ago, there were still two sub-licence cultivars, namely Eryn and Mnandi, but during the period under review only Darius was amongst the smaller noteworthy varieties. During 2014/2015, Electra had the biggest market share of the smaller varieties. Innovator which was in this position last year, now moved to the bigger varieties planted, with a 2.82% share of all seed potatoes certified in the reporting period.

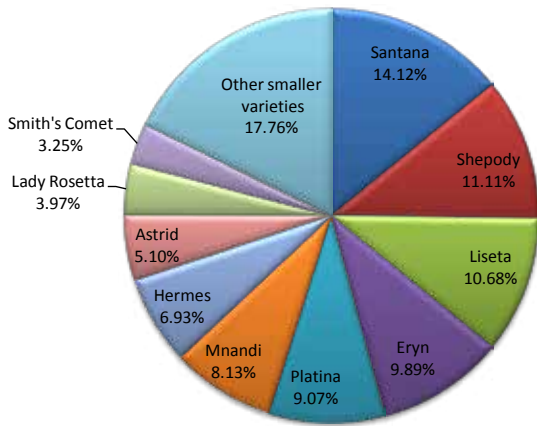


Figure 6: Composition of other smaller varieties in 2004/2005

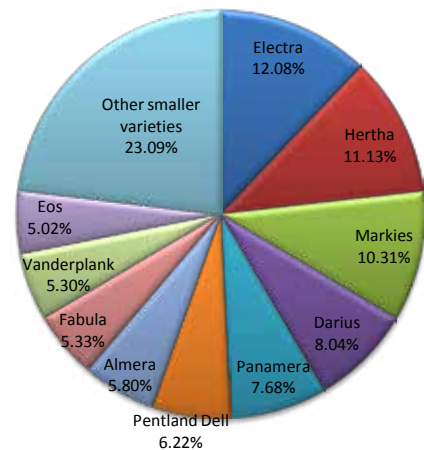


Figure 7: Composition of other smaller varieties in 2014/2015*

The generation distribution indicates that Generation 1 to Generation 4 seed potatoes increased from 3.194 million 25 kg bags to more than 4.5 million ten years later. It also indicates that G1 to G5 seed potatoes totalled 5.8 million 25 kg bags of a total of 6.5 million 25 kg bags certified. The number of G6, G7, G8 and Standard Grade certified, decreased from 15.4% ten years ago to 10.5% during the period under review. This shift in generations is a clear indication that the seed potato industry is very dynamic. These figures might change slightly as the final number of bags of seed potatoes certified on the plantings registered in June 2015 is not yet available. The generation distribution is indicated in Figure 8 and Figure 9.

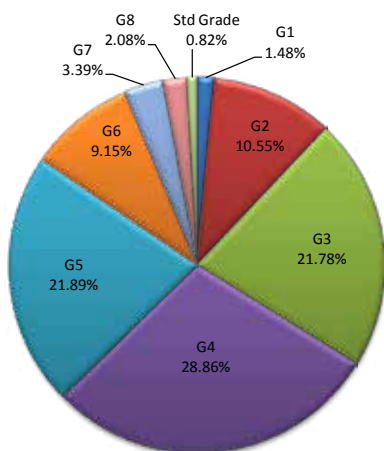


Figure 8: Generation distribution in 2004/2005

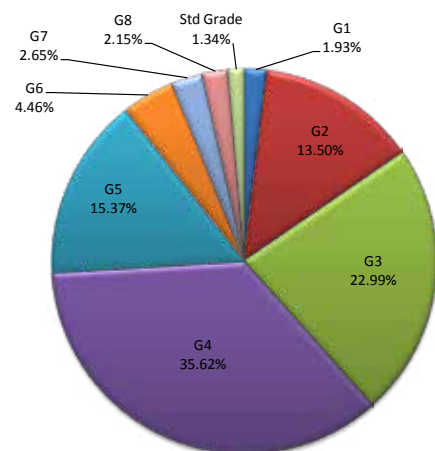


Figure 9: Generation distribution in 2014/2015*

At the Independent Certification Council for Seed Potatoes' meeting held in June 2014, the Registrar allowed the voluntary downgrading of seed potatoes by more than one generation for a period of two years before a final decision is taken in this regard. In the 2014/2015 reporting period, voluntary downgrading in class was also approved as part of the dispensation, after a decision taken by Independent Certification Council for Seed Potatoes that the responsibility is no longer on the seed potato grower to attach the Elite sticker, but it will be printed on the certification label. In the 2014/2015 period to the date of going to press, 17 512 bags were downgraded, of which 270 were downgraded by more than one generation. The dispensation is valid until 30 June 2016. Since Elite was printed on the certification labels, 1 209 196 x 25 kg bags were awarded Elite, of which 893 735 x 25 kg bags were downgraded to Class 1.

With regard to diseases, it is a matter of concern that the number of virus samples that tested free from virus diseases at the testing laboratories are decreasing gradually, but have improved slightly with regards to PVY, as is indicated in Figure 10. It seems however as if the occurrence of Potato Leaf Roll Virus is still increasing.

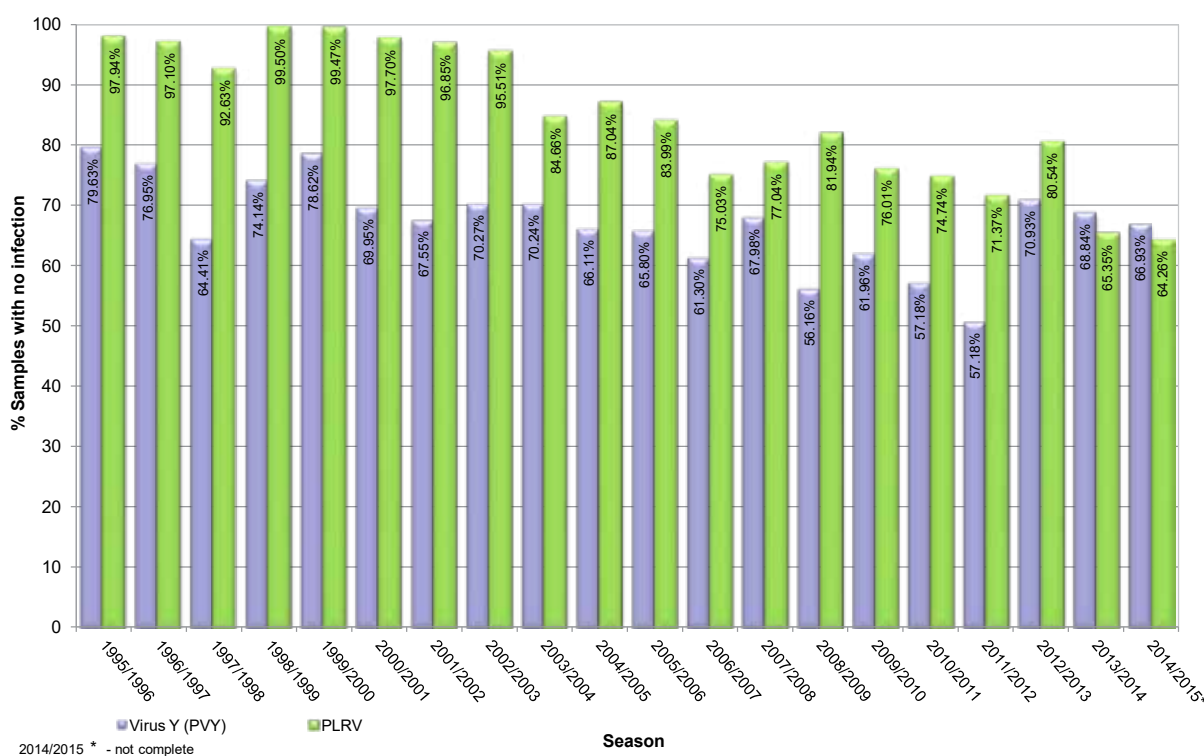


Figure 10: RSA: Virus occurrence (Field samples: G0 – G7 planted)

During the period under review, no potatoes with Potato Tuber Necrotic Ringspot Disease (PTNRD) were found during 2 675 tuber inspections conducted.

As part of the dispensation for the treatment of seed potatoes for silver scurf/black dot, record is kept in respect of all certified seed potatoes treated in order to use this data for motivation when the dispensation expires in November 2017. During the reporting period 731 676 x 25 kg bags of certified seed potatoes were treated. Most regions treated seed potatoes, except the Northern Cape, Western Free State, North West and Eastern Cape.

In April 2015 it was confirmed that a table potato planting was infected with *Ralstonia solanacearum*, the bacterial wilt-causing organism. This table potato planting was made from certified seed potatoes. *Ralstonia solanacearum* is a regulated quarantine pest, according to the Agricultural Pests Act, 1983 (Act No. 36 of 1983) and is defined as a "prohibited organism" under the South African Seed Potato Certification Scheme.



Subsequent investigations showed that other table potato plantings were also infected with bacterial wilt. The contamination could be traced to the original source of seed potatoes. Consequently, the certification of all “suspected to be contaminated” seed potatoes were revoked under Section 30 (1) b of the South African Seed Potato Certification Scheme and all growers have been informed of the possible presence of bacterial wilt in potatoes from this source. Officials from the Department of Agriculture, Forestry and Fisheries was notified of the situation and a number of orders have been issued in order to combat the spread of the organism and eliminate it where possible.

Over the past 20 years, bacterial wilt was found at times, but in most cases it has been detected before certification and could be dealt with by taking the appropriate control measures. In this case, the presence of bacterial wilt was only detected after certification and therefore the certified seed potatoes were already sold and planted at various potato farmers. An investigation of this case showed no fault or defect on the part of officials of Potato Certification Service, the testing laboratories or seed potato growers. It is possible that the level of contamination of the original seed potatoes was so low that it was not detected in the sample or was not picked as part of the sample, or was not detected during the certification inspections. In view of the above circumstances the Independent Certification Council for Seed Potatoes, at a meeting on 3 June 2015, agreed to support a claim for compensation to be submitted to the Department.

The wording of the certification label reads as follows: *“Certification only 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. This does not mean that any guarantees with respect to the disease - or virus free status or any other guarantee of quality or condition are given or implied, and means that the certification authority and any of its agents or employees under no circumstances will be liable for any damages or losses resulting from the planting or use of the seed potatoes, including any crops derived therefrom." The certification of seed potatoes is thus not a guarantee that the seed potatoes are disease free.



The Potato Quarantine Pest Committee, under the chairpersonship of the Directorate: Inspection Services of the Department of Agriculture, Forestry and Fisheries, is the watchdog of the potato industry with regard to 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 South African Seed Potato Certification Scheme. This Committee fulfils all the roles and responsibilities of the previous Bacterial Wilt Committee, except that its duties and membership has been expanded to include all prohibited organisms as well as all departmental divisions.

It is important to note that the Department of Agriculture, Forestry and Fisheries is sampling all units with orders for PCN and, where no cysts are found, the orders will be lifted.

The South African Seed Potato Certification Scheme is based on phyto-sanitary status, as well as variety purity. Mixing of varieties was only found in 0.42% of all seed certified. Where mixing took place, the grower was notified in writing and the necessary corrective action was instituted. Out of the 6,5 million bags certified, mixing detected affected only 27 810 bags.

Owners or agents of varieties, as well as the seed potato growers of South Africa requested that the term for protection in terms of Plant Breeders' Rights be extended from 20 to 30 years for all varieties, irrespective of whether it is already listed or not, in order to bring the national regulations in line with international standards. Finalisation of the process is still awaited.

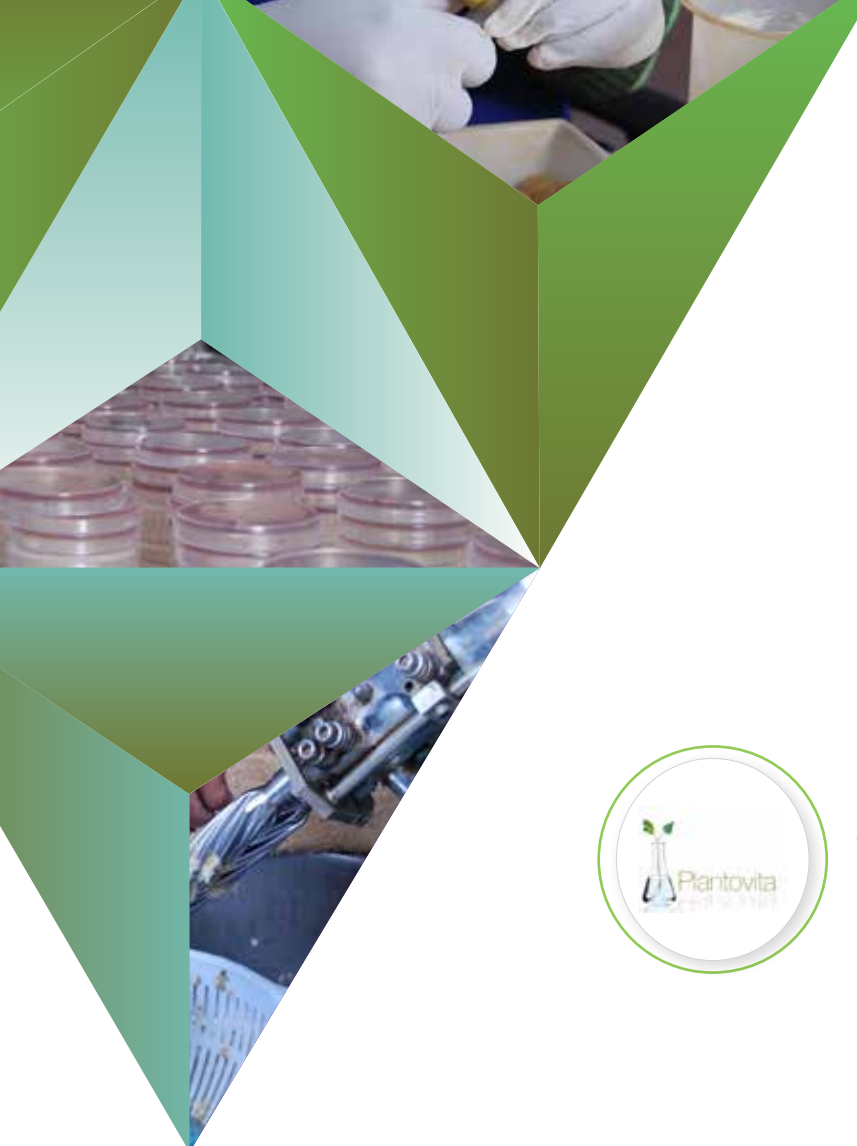
Potato Certification Service plays a leadership role in identifying needs within the seed potato industry, as well as in identifying and dealing with new diseases and pests. Potato

Certification Service has therefore in collaboration with Department of Agriculture, Forestry and Fisheries' "Early Warnings" division, held discussions with the tomato industry regarding an exotic pest, *Tuta absoluta*, or the tomato leaf miner, which can cause severe damage to tomato crops, but can also attack potatoes. Potato Certification Service has issued a press release in this regard in order to inform growers of this threat and what can be done when someone suspects that the pest is found here.

Potato Certification Service serves as the link between the potato testing laboratories and the seed potato growers of South Africa. Therefore Potato Certification Service plays an integral role in the Potato Laboratory Services Technical Committee where matters of common interest are discussed under the chairpersonship of Dr Keetch, as Chairman of the Independent Certification Council for Seed Potatoes.

In spite of the recent outbreak of bacterial wilt, South Africa has a scheme that is scientifically proven, technically justified and credible, which makes high quality certified plant material available for the potato industry. The Scheme is implemented by qualified personnel, backed by laboratory results generated by approved testing facilities. **The planting of certified seed potatoes is the best way to ensure high yields of excellent quality, which leads to profitable crops and sustainable food security.**

Please visit us at www.potatocertification.co.za.



PLANTOVITA

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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

CHAIRMAN

As did every previous season, 2014/2015 gave rise to issues identified locally or brought to the table of the board of directors of Plantovita by the Potato Laboratory Services director representative of a region.

The following issues were debated:

- The role of Plantovita with

regard to technical support afforded to the regions.

- The making available by the laboratory of non-official results to the grower.
- How did the final evaluation and approval of PCR technology as official testing method in Potato Laboratory Services conclude?

- The occurrence of bacterial wilt in the Sandveld gave rise to the question of whether the laboratory tests can be trusted.

Future role of Plantovita in Potato Laboratory Services

The privatisation of the laboratories when the pool was unbundled, the resulting competition between regions and the individuality of the regions arising as a result placed Ms Marieta Botha increasingly in the position of player and referee. In November 2014, with reference to an instruction of the executive of Potato Laboratory Services, Ms Botha, then the manager of Potato Laboratory Services, resigned as manager of the regional laboratories. However, the role of Plantovita still remains that of controlling laboratory in Potato Laboratory Services. With the approval of the board of directors of Plantovita the term *Management Fee* was changed to *Technical Support Fee*. This refers to the fee paid by the regions to Plantovita for technical support and problem solving, training, maintenance of standards, quality control, audit investigations and representation of the laboratories at the various industry forums. The board of directors of Plantovita are of the opinion that this role of Plantovita is vital for the maintenance of standards – especially in the changed environment.

Quicker test results possible soon

The Potato Laboratory Services protocol is the Bible of the laboratories and sets the standards for the testing of the samples and the handling of test results. It has been brought to the attention of Plantovita that growers wish to receive test results sooner. The urgency of the request necessitated management to submit the matter to the board of directors of Plantovita for discussion – especially because the proposed method involved specific risks and was at variance with the guidelines of the protocol. The matter was debated intensely and Plantovita and Potato Certification Service were instructed to come up with a workable solution. It is gladdening news that progress has been made with the assistance of an IT expert and growers should soon be able to receive non-official results with the press of a button. As is the case with technology there may initially be a few creases here and there. The laboratories will initially handle the electronic and paper versions together until all the problems have been identified and handled. Thank you to Potato Certification Service for initiatives with regard to this process. Thank you to Ms Anel Espach for her expert contribution with regard to the needs of the laboratories in such a system. To date this account has been financed by Plantovita and, as a sign of goodwill, no region was asked for contributions.

Finalisation of the PCR protocol

The finalisation of the PCR protocol and the result of the final evaluation and approval thereof by the

Department of Agriculture, Forestry and Fisheries and the Independent Certification Council for Seed Potatoes for the implementation of molecular technology in the testing laboratories was amongst this year's greatest laboratory news.

The project has been finalised and PCR technology was implemented as additional testing method for the testing of seed potato samples on 11 May 2015. At the meeting of the board of directors of Plantovita held on 2 June 2015, Ms Botha drew the attention of the directors in her capacity of chief executive officer of Plantovita to the following from the report of the independent evaluator, Prof Johan Burger of the University of Stellenbosch:

The test procedure steps were executed by one analyst (Ms Anel Espach, MSc (Agric) Microbiology) and three technical assistants who all are permanent employees, and who received in-house training to do the sample handling on a routine basis. The technical assistants seemed familiar with the procedures and the sample preparation steps were executed effectively and accurately. The analyst was in control of the entire procedure. She is a meticulous scientist with obvious extensive experience in plant disease diagnostics. I got the impression that she not only can execute the entire test procedure in a very routine and reproducible manner, but with a clear understanding of the science behind the technologies – to an extent that she can optimise and improve protocols to make these more efficient and economical, and to effectively troubleshoot if problems arise.

That, is a summary of the

competence of our technical manager in Potato Laboratory Services as seen through the eyes of an outsider/expert. Anel, congratulations on this achievement! There was a great deal of criticism before and during the Plantovita handling of this project. The work which you and your team did here is a milestone in the progress of the services rendered by the laboratories.

PCR technology is available as alternative testing method for certification purposes. An official notification in this regard with an indication of the procedures and costs involved was sent to all seed potato growers. You are welcome to contact Plantovita (Ms Anel Espach or Ms Marieta Botha) at for any further information.

Reliability of the bacterial wilt test

Questions have arisen with regard to the reliability of the bacterial wilt test after the occurrence of this pathogen in the Sandveld production region. You can follow the Plantovita view on this in the Potato Laboratory Services / Plantovita contribution in the Potato Industry Report.

Last but not least

The Western Free State laboratory (now Wesgrow Potatoes) once again deserved the Dr Niël Theron floating trophy. To quote the Audit Officer of Plantovita, Ms Anel Espach:



The finalisation of the PCR protocol and the result of the final evaluation and approval thereof by the Department of Agriculture, Forestry and Fisheries and the Independent Certification Council for Seed Potatoes for the implementation of molecular technology in the testing laboratories was amongst this year's greatest laboratory news.



- *This team is truly dedicated to their lab and proud of the results generated there!*
- *The facility is tidy and order is maintained. This immediately creates the impression of control and processes which can be followed absolutely.*
- *Samples are handled correctly and all the tasks involved in the testing process are handled with precision.*

- *The protocol is applied to the letter. Advice is followed and improvements to the set up are continuously effected. This leads to high efficiency and productivity.*

Congratulations to Mr Gerhard Posthumus as owner of the laboratory and Ms Cecilia Nel and her team who are responsible for all the above-mentioned positivity.

Conclusion

As usual I wish to conclude with words of appreciation. Firstly to the laboratory personnel for their indispensable contributions to the maintenance of a healthy seed potato industry. My question is: Do we always have an understanding and appreciation of the expertise, integrity, experience and knowledge which they add to the final word in the certification process?

Thank you to the directors of Plantovita for their cooperation, debating and best intentions to support Ms Botha and Ms Espach and to lead them to the advantage of all the laboratories in the group. Thank you to our colleagues at Potato Certification Service and Potatoes South Africa. In spite of the fact that we serve on different platforms, I truly believe that each one of us only wants the best for the potato industry of this country as a whole.

To all the seed growers, thank you for supporting the laboratories in your regions. I boldly insure you on behalf of the staff from all the companies of their diligence and true intentions to always follow the protocol to the letter.

God bless the potato industry of South Africa.

**Johan van den Heever
CHAIRMAN**



CHIEF EXECUTIVE OFFICER'S REPORT



MARIETA BOTHA

CHIEF EXECUTIVE OFFICER

I am convinced that when science and biology are the basis of your daily bread and butter, you are going to learn over time that the organisms with which you work, are complex, changeable and unpredictable and can at times place you in situations which are difficult to prove, never mind explain.

The occurrence of bacterial wilt in the Sandveld seed potato production area

It stands to reason that the occurrence of bacterial wilt in the Sandveld seed potato production area led to growers questioning whether all the procedures with regard to the South

African Seed Potato Certification Scheme involved in the certification processes are watertight. The fact that the pathogen was not traced during the test process (ELISA) gave rise to many questions on the part of the growers. Seed potato growers could therefore be in doubt about this very important aspect of the certification process.

Latent infection?

In view of the fact that no plants with typical symptoms of bacterial wilt were noticed and noted during the field inspections of the units concerned, it is presumed that in most of the cases the majority of the samples were probably in the latent phase during the testing stage.

Latency means the infection is hidden and no symptoms develop.

The number of bacteria could play a role, but this is not the only reason why a plant could be infected latently. Latency is a complex phenomenon in which a number of factors such as resistance/susceptibility of a cultivar, soil conditions, climate, number of infected tubers and growth stage of the plant are interwoven and together contribute to the occurrence of the latent infection.

The opposite of latency is *symptomatic infection*. It stands to reason that this is a more understandable concept where the conditions contribute favourably to the pathogen multiplying actively to

the point where clear and typical symptoms manifest.

The test which we use in PLS

The *Ralstonia solanacearum*-specific ELISA-test kit as developed, is manufactured and provided by Prof Bellstedt of the University of Stellenbosch, Department Biochemistry. This test kit has been used by Potato Laboratory Services since the nineties. Several research projects to validate and optimise the routine utilisation of this specific test kit were conducted in the early 1990's in cooperation with the Agricultural Research Council and under the guidance of the late Dr Niel Theron. The scientists involved were experts in the field of this pathogen and technique. This work was done especially with a view to the implementation of the ELISA testing method as part of the test process and a refinement of the whole process - **to establish a process which is practicable and reliable**. The results of these projects carried out over several years were used to optimise the protocol to what it is today.

Is the test kit capable of tracing latent levels of infection?

The question can be answered as follows: Table 1 * *determined by isolating the bacteria*
From Table 1 it is clear that the tracing of latent infections is only possible if the number of bacteria is more than the tracing capacity of the test. This is true in the case of any bacterial wilt specific testing method and testing process and is also only applicable if infected tubers are included in the representative sample when sampling.

Facts with regard to the ELISA

bacterial wilt-specific test

- This test kit of the University of Stellenbosch has been used since 1998. The drop in confirmed positive cases is proof of the success of the test.
- Of the approximately 10 618 tests conducted in Potato Laboratory Services, it has been possible to confirm 49 (0.46%) results as positive.
- Therefore 10 569 samples tested negative (99.54%).
- Every test has limitations and can NEVER guarantee that the sample is 100% free of the virus for which the test has been conducted - EVEN IF THE TEST IS CONDUCTED ABSOLUTELY.
- The ELISA testing method for the tracing of bacterial wilt was



- the traceability limit of the test kit.
- The reduction of 100 tubers to 50 by pooling has been thoroughly investigated. This has cost implications for the grower and does not guarantee that latent infection is going to be traced.
- Alternative test kits have already been considered and evaluated. There may

Table 1 * determined by isolating the bacteria

ITEM	TRACEABILITY LEVEL / GRAM OF TISSUE
ELISA test kit for BW used in PLS at present	10 000 bacterial wilt cells / gram of tissue
Tuber with ring symptoms (symptomatic infection)	* 1 000 000 (+) bacterial wilt cells / gram of tissue
Latent tubers	* 10 bacterial wilt cells / gram of tissue

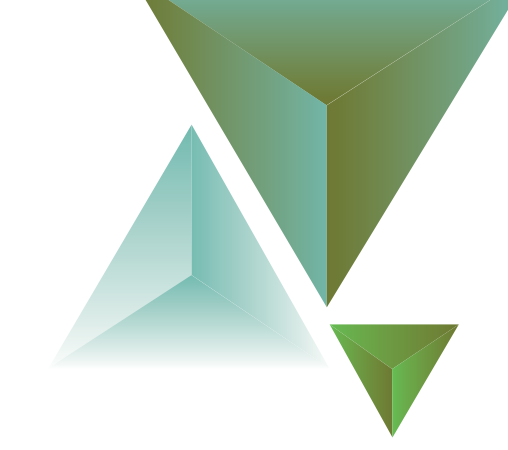
researched thoroughly before being implemented in the laboratory.

- The ELISA test remains the most economic and practicable test for routine testing when compared with planting out and molecular methods.
- *In any test latent infection will always be an issue to be borne in mind:*
 - The purpose of pre-warming samples is to multiply the number of bacteria, but can still not guarantee that the levels reached will be higher than

be small differences in sensitivity. Still no manufacturer of these kits can guarantee the tracing of latent infection 100%.

- Conventional techniques require another type of laboratory and staff with experience in the identification of the specific pathogen. The ELISA test can be conducted by a trained Laboratory Technician without previous experience. Increased costs are again a factor.
- The use of an enriching medium can be considered. There is, however, the chance





that saprophytes present will derive greater benefit and this could hamper the chance of tracing the pathogen.

Researchers of CIP in Peru are of the opinion that :

“If you want to be sure that a yield is free of bacterial wilt, you should test every tuber in the crop.”

It stands to reason that this would be impractical and not economically feasible. A specific number of tubers (determined statistically) is therefore tested in order to determine an estimated possibility of infection.

Therefore a negative answer can never guarantee that a seed lot is free from bacterial wilt.

Can Plantovita do something to reduce the occurrence of negative bacterial wilt results?

Internationally work is continuously done to try to improve existing methods for the more accurate tracing of latent infection. It is the function and task of the controlling laboratory to monitor international trends and literature. Should any development occur in this regard, the grower can be sure that it will enjoy the necessary attention, investigation and consideration. A present example: The PCR project with regard to the confirmation process of bacterial wilt in process at Plantovita at present.

Warming bacterial wilt samples

The outbreak of bacterial wilt in the Sandveld region caused several role players to be concerned and the warming of all samples to be tested for bacterial wilt was considered. The following is quoted from a report to the then Potato Laboratory Services Advisory Committee in 2012 and describes how the present situation affects the laboratories. FOOD FOR THOUGHT!

It is believed that resolutions with regard to the handling of samples as part of the certification process are well thought out and passed for good reasons. The prescription with regard to the warming of samples originating from suspect units and/or suspect samples, as well as dispensation and virgin soil samples before the establishment of the bacterial wilt test, affected the laboratories as follows:

- **Lack of storage space for the number of samples to be warmed.**

A lack of space forces the laboratories to incubate these samples in the same room as virus samples. This is by no means good practice if borne in mind that every effort is made to expose bacterial wilt samples as little to risks as possible on account of the quarantine status of the disease.

- **Sample quality is important.**

When samples are delivered in an already rotten condition, the chances of further rotting escalates at store temperatures for two weeks at 25°.

- **Integrity of the sample is placed at risk.**

The handling of virus and

bacterial samples in one room (warming room) could increase the chance of mixing.

It is accepted that suspect fields and new fields will remain part of this process. The experience is, however, that the number of samples in this category is increasing. In order to maintain the integrity of the sample and the process, extensions will have to be considered at all the participating laboratories and it stands to reason that this will have cost implications.

The question is therefore what the extent hereof will be in the future. Is this a status which will be maintained?

I wish to acknowledge my colleague and Technical Manager of PLS / Plantovita, Ms Anel Espach, for her specialised knowledge and inputs with regard to this report.

Implementation of molecular tests (PCR = Polymeric Chain Reaction) for the certification of seed potatoes

Potato Laboratory Services moved on to an international level of service rendered when PCR received the green light as alternative testing method for certification purposes. Molecular testing of seed potatoes was at the disposal of the seed potato growers with effect from 11 May 2015. The road up to here was full of challenges in terms of financing, the acceptance of the industry and the availability of a facility.

Without the financial and moral support of the whole industry we would hardly have been capable of progressing to this level. For this reason we wish to once again thank everyone who contributed in whatever way to the establishment and financing of the PCR project.

After obtaining the Independent Certification Council for Seed Potatoes approval (November 2014) of PCR as alternative testing method for the tracing of PVR and PLRV for certification purposes, the final approval was subject to an independent investigation by an expert on molecular tests. The Department of Agriculture, Forestry and Fisheries requires that the application of new methodology for commercial purposes first be investigated independently before being approved by the Department. This condition is applicable to any laboratory registered in terms of the Plant Improvement Act, 1976 (Act 53 of 1976).

Prof Johan Burger of the University of Stellenbosch visited the Plantovita laboratory on 23 and 24 March 2015 and investigated the facility and procedures (protocol). Prof Burger refers to the following in his report under *Inspection of Infrastructure and Equipment*:

"Plantovita possesses modern analytical laboratories that conform to all requirements for the routine PCR detection of the pathogens in question.....I was particularly impressed with the impeccable cleanliness and tidiness of these laboratories"

Under the heading STAFF the following is quoted:

"The test procedure steps were executed by one analyst (Ms Anel Espach, MSc (Agric) Microbiology) and three technical assistants who all are permanent employees, and who received in-house training to do the sample handling on a routine basis. The technical assistants seemed familiar with the procedures and the sample preparation steps were executed effectively and accurately. The analyst was in control

of the entire procedure. She is a meticulous scientist with obvious extensive experience in plant disease diagnostics. I got the impression that she not only can execute the entire test procedure in a very routine and reproducible manner, but with a clear understanding of the science behind the technologies – to an extent that she can optimise and improve protocols to make these more efficient and economical, and to effectively troubleshoot if problems arise."

With reference to the above-mentioned report Ms J Sadie, the Registrar of the Plant Improvement Act, sent a letter to Plantovita on 28 April 2015 indicating that PCR had been approved as alternative testing method for the tracing of viruses.

The traditional ELISA or the revolutionary PCR?

Seed potato growers indicated in an independent survey that in most cases they can only really decide when the field sample is drawn whether they will for certification purposes chose between the two available testing methods, namely the traditional ELISA testing method or the revolutionary PCR testing method. The choice will especially be influenced by what happened to the planting during the growing season. A written invitation in connection with the availability of PCR at Plantovita was sent to all the growers in the meantime.

In vitro and field samples have already undergone the process of molecular tests and very good results were obtained. It was also gladdening to see that field samples, contrary to fears of some growers, CAN test 100% free of viruses by means of this exceptionally sensitive technique. On the contrary, to date no official results or comparative

results between the ELISA and PCR methods during the evaluation project created the impression that samples would now test positive. The only case when virus was traced by means of PCR in GO tubers was coupled to a corresponding positive result with the ELISA. It will, however, take time for growers to trust the technique and to fully realise and appreciate the value of the technique as an elite stamp with regard to disease content.

It needs to be emphasized once again that there was never a thought of eliminating the ELISA testing method. ELISA as testing method has an own success story in the South African seed potato industry. No industry which relies on tests as final answer in a process of certification and is at times confronted by situations where results are questioned, can at this stage manage without the increased sensitivity offered by molecular tests. PCR makes a tremendous contribution to the services rendered by the controlling laboratory in terms of available techniques, especially in terms of the tracing and confirmation of the presence of prohibited organisms by means of alternative and extremely sensitive methods. At present Plantovita is in the process of protocol development for the confirmation of positive bacterial wilt readings generated by means of the ELISA test.

The controlling laboratory has experts and specialists in the fields of expertise required. The success of the PCR project and the opinion in this regard of an independent expert should put you at ease that the services rendered in PLS are moving to a higher level in the capable hands of our Technical Manager.



I am convinced that when science and biology are the basis of your daily bread and butter, you are going to learn over time that the organisms with which you work, are complex, changeable and unpredictable and can at times place you in situations which are difficult to prove, never mind explain.



Rendering of technical services by Plantovita to the regional laboratories

There was a time when the controlling laboratory (previously CBS and now Plantovita) was responsible for the total management of the majority of the laboratories. This was largely coupled to the existence of a financial pool of

which the purpose was to equalise the laboratory registration costs between the regions. As it goes in a modern world where finances are an issue, the regions decided in 2011 via the then Board of Directors of Potato Laboratory Services to discontinue this financial pool with the resulting independence of the regions and the establishment of 90% shareholding in Plantovita by the seed potato industry. (As the previous CBS, Plantovita belonged 100% to the Dry Bean Producers' Organisation.)

However, irrespective of the discontinuation of the pool and all the above-mentioned structural changes some of the regions still preferred to make use of the financial management services of Plantovita – mainly on account of the convenience involved and the availability of expertise with regard to laboratory budgets.

In the course of time the new independence of these regions made it impossible for the Chief Executive Officer of Plantovita to act as player and referee. In November 2014 the Executive of Plantovita instructed Ms Marieta Botha to resign in terms of the financial and ground level management of the laboratory companies. The controlling laboratory will therefore only be involved in the technical management of the regional laboratories, but can still be consulted with regard to any other aspects of management if there is a need. The roles of Ms Botha and Ms Espach as Chief Executive Officer and Technical Manager of Potato Laboratory Services / Plantovita respectively will remain unchanged

irrespective of these changes.

What was known over the years as a *Management Fee* payable by the regions with the approval of the Board of Directors was changed to the name *Technical Support Fee* in June 2015 and refers to the financial contribution which the regional companies make monthly for technical support services on the part of the controlling laboratory.

What does the technical support fee entail?

The technical support of the controlling laboratory includes but is not limited to the following:

- The Management (Chief Executive Officer and Technical Manager) of Plantovita represent the laboratories at the highest level of the industry.
- Plantovita must see to it that the standards as determined in the different test protocols are applied and maintained in the respective laboratories by means of audit visits taking place in the regions annually in the testing season of the region.
- Proficiency tests to gauge the standardisation between the laboratories are developed and evaluated at Plantovita.
- Plantovita is responsible for the training of all newly appointed laboratory technicians in any of the existing laboratories.
- Continuous training of the existing laboratory technicians is the task of the controlling laboratory. This takes place, *inter alia*, by means of an annual Potato Laboratory Services workshop.

- At times of a test problem of a technical nature it is the work of Plantovita to support participating laboratories, seek solutions and make recommendations until the problem has been addressed.
- Plantovita makes recommendations to the industry in terms of specific disease investigations and matters related to the Scheme.
- The Management of Plantovita are members of European virus working group (EAPR) and therefore represent Potato Laboratory Services in this regard at international level.
- If necessary to change existing protocols, Plantovita does the investigations and effects the necessary improvements in order to optimise the test processes.
- The Technical Manager of the controlling laboratory keeps abreast of diseases and test developments nationally and internationally and must also, where necessary, make recommendations and identify, compile and submit to the National Potato Research Committee projects for investigation.
- The controlling laboratory evaluates all ELISA results in respect of bacterial wilt tests before the results may be made available by the regions to the industry.
- When tests in whichever region

become suspect, the controlling laboratory becomes the consultant for investigations and reporting as far as the tests involved in the specific situation are concerned.

It is extremely important that owners and directors of these companies understand that the role of the controlling laboratory differs completely from the routine carrying out of ELISA tests in the regional laboratories. This point has been discussed at more than one meeting of the Board of Directors of Plantovita. The directors were in agreement that technical support is the indispensable role of the controlling laboratory and that an approved tariff be coupled to these important services.

The personnel of Plantovita and Potato Laboratory Services

The staff of Plantovita are selected for specific tasks. These tasks are broader than the routine carrying out of ELISA tests. Exposure to unique situations, knowledge of plant pathology, identification of prohibited organisms, other viruses, bacteria, fungi and physiological deviations by means of conventional, biochemical and molecular techniques is part of the daily duties of the Laboratory Technicians of the controlling laboratory.

As I understand, other industries also experience that keeping junior staff and the empowerment of these employees in terms of experience and specific expertise, is increasingly becoming a challenge. Employers are blessed if juniors remain in the service of the company for a period of at least five years.

In the laboratory it is the experience that the majority of the junior

personnel who resign as soon as they begin to work as a Potato Laboratory Services laboratory technician, come to the conclusion in due course that that with which they are earning their daily bread and butter, is not what they hoped for the day when career choices were made. The other side of the coin is naturally that when more senior and experienced candidates are considered for a post, they are already on remuneration levels which cannot be afforded by the company for that post – a fine balance therefore for consideration in respect of appointments when posts become vacant and the right candidates have to be identified amongst many applications.

The composition of the personnel in the Potato Laboratory Services Group underwent the following changes during the period under review:

- Ms Marizelle van der Merwe was appointed in the Northern Cape laboratory as Laboratory Technician. Ms Van der Merwe completed the compulsory two-week training at Plantovita and has already experienced a first audit round.
- At Plantovita Ms Michelle Louw indicated after four years of service as laboratory technician that she wished to become qualified in another direction. She was replaced by Ms Sonika Maritz. Ms Maritz has good experience of SANAS accreditation and PCR testing. This naturally addresses direct needs of the controlling laboratory.
- Ms Lenanda Barnard was appointed in the virus laboratory at Plantovita as laboratory assistant. On account of the tremendous pressure brought about by SANAS accreditation, as well as

the expansion in methodology, the need for this new post was motivated to and approved by the Board of Directors of Plantovita. Ms Barnard is undergoing training as seed analyst.

- The administrative officer of Plantovita, Ms Beverly Palmer, retired. Ms Marne Brits was appointed in this post. Ms Brits's duties were expanded to those of the safety officer of Plantovita. She is furthermore responsible for the diffused lighting facility and is at present training to qualify as seed analyst. The expansion of the responsibilities of this post has led to staff with potential being utilised optimally and this has reduced the pressure on posts which staggered under these additional tasks.
- Mr Edward Mohlala who was in the service of Plantovita in terms of a contract was appointed on a permanent basis and is the assistant of Ms Brits in the diffused lighting facility.

The management of Plantovita regards it as part of their task to train the laboratory technicians of the respective laboratories and to empower them to a level which stretches much further than merely the application of the test protocols. One such opportunity is the annual Potato Laboratory Services workshop.

The annual Potato Laboratory Services workshop

The personnel are tasked to present lectures about subjects which have been identified throughout the year from one to the next workshop. The theme for the latest year under review was 'Stywe lyme' and the focus was on the virus ELISA test. In view of the fact that practical work

was part of the workshop program it was for the sake of an available facility, presented at Plantovita in Pretoria.

The agenda was as follows:

- Assert yourself in the work environment without losing your identity
- Potatoes and the laboratories
- The danger of micromanagement
- Principles of tracing techniques
- The ELISA test:
 - o Background readings
 - o Factors which could hamper the ELISA
 - o Sprout stimulants and ELISA
- Administration:
 - o Interpretation of the Scheme
 - o Stock levels
 - o Archives
- Harmful insects in potato cultivation
- Testing of leaf samples
- Maintenance of equipment
- Intermediary verification of pipets and scales

Every laboratory technician also had to conduct a full ELISA virus test independently.

To work in a commercial laboratory day after day, to follow the same routine daily, to maintain exceptionally high standards continuously and to have the ability to, under these circumstances, continually improve standards to levels above those required, takes an exceptional worker with a specific approach.

The Niël Theron floating trophy

During the Potato Laboratory Services workshop this trophy is awarded to the laboratory which stands out in respect of the following aspects:

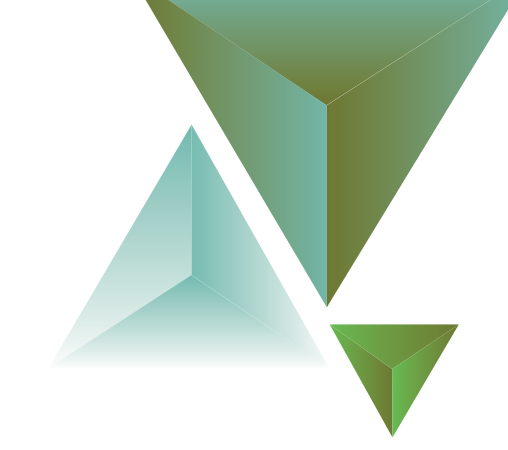
- Absolute application of the test protocol
- Good laboratory practice
- Continuous/continual improvement in own laboratory (standards and facilities)
- Ownership
- Maintenance and implementation of rules and regulations
- Being a part of the PLS group with heart and soul

The testing laboratory of Wesgrow Seed Potatoes, under the management of Ms Cecilia Nel, deserved the Dr Niël Theron floating trophy in 2014. According to the Plantovita auditing officer, Ms Anel Espach:

- This team is truly dedicated to their laboratory and the results generated at the laboratory!
- The facility is neat and order is maintained and this immediately creates the impression of absolute control and control of processes.
- Samples are handled correctly, the tasks involved in the testing process are done meticulously.
- The protocol is carried out absolutely.
- Advice is followed and there are continual improvements in the setup leading to increased effectiveness and productivity.

Congratulations to Ms Nel and her team. Since the awarding of the floating trophy in 2008, this is the third time that this laboratory has deservedly received this sought after award.

The personnel of this laboratory are involved heart and soul in what they do. They constitute a team having the ability to grow and to raise standards continually in spite of being subjected to a given daily repetitive routine.



Can any laboratory test samples for certification purposes?

Only laboratories which enjoy Independent Certification Council for Seed Potatoes approval may test samples in this category.

Independent Certification Council for Seed Potatoes approval means that a laboratory deserves this status after inspection, training and approval on the recommendation of the controlling laboratory in Potato Laboratory Services (Plantovita). The Independent Certification Council for Seed Potatoes approval of an existing testing laboratory is renewed annually after a complete and compulsory annual audit by the Technical Manager of Potato Laboratory Services /Plantovita.

Laboratories are audited/inspected/assessed in terms of two sections – the virus-specific ELISA laboratory and the bacterial wilt-specific ELISA laboratory. In view of the fact that the protocols of the afore-mentioned tests differ and that one has to apply the protocols strictly from a point of view of quality control, these tests have always been performed separately and the two sections are audited separately. This provides the basis for the correct implementation and performance of tests for different pathogens with specific protocols.

Protocols are drafted, developed and maintained by Plantovita. It

therefore stands to reason that the controlling laboratory will conduct the audits in view of the fact that the protocols set the standards applied. In addition, Plantovita is audited by the Department of Agriculture, Forestry and Fisheries.

A further purpose of the audit entails meaningful recommendations to comply with protocol requirements and is also a step in the direction of attaining the ISO 17025 standard in the future.

The functioning of all the participating laboratories is at present at such a level that the standard of tests and reliability of results do not differ significantly. This is reflected in the test results in respect of dispute samples, as well as the results of proficiency tests. Small differences between the results of tests in respect of control samples can be explained by logistic challenges in respect of, for example, the transportation of the referent samples to the respective regions.

Factors which are taken into consideration during a laboratory audit include the following:

- **General laboratory neatness and order:** Chemicals, glass and plastic wares, equipment, working surface and floor, access to the laboratory
- **Protocol for test procedures:** The presence and use thereof in the laboratory
- **Upholding the official Code of Conduct** with regard to what an Independent Certification Council for Seed Potatoes approved laboratory may test
- **Storage of potato tubers:** Before, during and after testing
- **Handling of samples:** Security, assurance and

traceability.

- **ELISA procedure:** Correct preparation and storage of buffers, ELISA test kit, absolute performance of the test
- **Personnel:** Contracts, training, capacity
- **Administration:** Filing of source documents, liaison with Potato Certification Service, maintenance of archives, neatness
- **Laboratory safety:** Implementation of laws appertaining to occupational safety as applicable to laboratory activities

Can the Independent Certification Council for Seed Potatoes approval of a laboratory be withdrawn or suspended?

A laboratory could forfeit Independent Certification Council for Seed Potatoes approval for one or a combination of the following reasons:

- Audit recommendations are not implemented within the time allowed
- The Potato Laboratory Services code of conduct as set out in the official test protocol is transgressed and unauthorised samples are tested.
- If it be found during the audit that there are actions which could place the outcome of the test at risk
- If actions which compromise the integrity of the Scheme come to light during the audit

The Chief Executive Officer and Technical Manager of Potato Laboratory Services / Plantovita have been authorised to recommend that the Independent Certification Council for Seed Potatoes approval of a laboratory be suspended for one or more of the above-mentioned

reasons and can after corrective action and satisfactory inspection recommend that the suspension be terminated.

Some of the points included for inspection during the audit are not necessarily aspects over which the laboratory technician has control. Control by the owner, manager or managing director over matters related to staff is an example. These can nevertheless cause problems during a testing season and put pressure on the laboratory technician and the system as a whole and therefore also the results obtained. We are obliged by law to comply with the provisions of all labour laws, as well as the Health and Safety regulations. The managing director of a company is usually the person who is held responsible if this type of legislation is not complied with. It is therefore the duty of the manager of the laboratory to see to it that aspects required to comply with these laws are implemented.

At present all the laboratories enjoy Independent Certification Council for Seed Potatoes approval

Quicker test results possible soon

It has been brought to the attention of Plantovita that growers wish to receive test results sooner. The urgency of the request necessitated Management to submit the matter to the Board of Directors of Plantovita for discussion – especially because the proposed method involved specific risks and was at variance with the guidelines of the protocol. The matter was debated intensely and Plantovita and Potato Certification Service were instructed to come up with a workable solution. It is gladdening news that progress has been made with the assistance

of an IT expert and growers should soon be able to receive non-official results with the press of a button. However, results are only final and official after approval by Potato Certification Service. The laboratories will initially handle the electronic and paper versions together until all the problems have been identified and handled.

In conclusion

I am in the privileged position to still enjoy the services of Mr Clive Trent, friend and colleague, after his retirement for the editing and translation of reports – thank you Clive. *This is highly appreciated.*

To the personnel of Potato Laboratory Services – the test result is the final step in the process of certification and a combination of your accuracy, your integrity and the realisation of the seriousness of that with which you are busy. The purpose of Plantovita is to authorise and support you in this regard. We need to continue to pull as a team in one yoke even if we work in different companies. To the seniors, support the management of Plantovita to maintain this family, to raise the youngsters with Potato Laboratory Services values and to expand and to maintain respect for our services.

Anel, sincerely thanks for your example and inspiration and for the contribution which you make to the growth and evolution in Potato Laboratory Services. You have embraced your responsibility as technical manager and have developed into an expert and specialist in the applicable technology and methodology.

A special thanks to the board of directors of Plantovita for their support and trust.

Messrs Johan van den Heever and Jakkie Mellet and Dr Fienie Niederwieser, I appreciate your inputs and feedback as executive of Plantovita and even if the feedback is not necessarily always what I hoped for, I do respect your decisions.

Thank you to Dr Dave Keetch and the members of the technical committee for exposure to hours of blood sweating and reasoning and seeking solutions and answers to often difficult and sensitive issues related to the industry.

Thank you to the staff of the Dry Producers' Organisation for the handling of the finances of Plantovita. Thank you also to Ms Trudy Pretorius for handling the meetings of the board of directors and other matters related to the company.

My love for and gratitude to a mother with an inner strength, salt of the earth wisdom and no nonsense outlook on life. It was you who taught me that it is not always a weakness not to know everything, that mistakes can be rectified and that every person who crosses my path is also just a human being.

Thank you to a Heavenly Father who is in CONTROL. Belief herein has been an anchor when great changes have taken place and the human ego was obliged to bow before the interests of the industry.

MARIETA BOTHA
CHIEF EXECUTIVE OFFICER



BUSINESS REPORT

The laboratories in Potato Laboratory Services

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.

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 Potato Laboratory Services protocols are continuously maintained by all the laboratories. The function of the controlling laboratory is explained extensively later on in the report.

All five companies must be registered with the Department of Agriculture, Forestry and Fisheries in terms of the Plant Improvement Act, 1976 (Act 53 of 1976) 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 technical committee and the audit reports submitted to the technical committee, a laboratory earns the authorisation of the Independent Certification Council for Seed Potatoes 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 Potato Laboratory Services. 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 production regions. 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 Potato Laboratory Services 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 Dry Bean Producers' Organisation 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 chairman of the board of directors is elected independently.

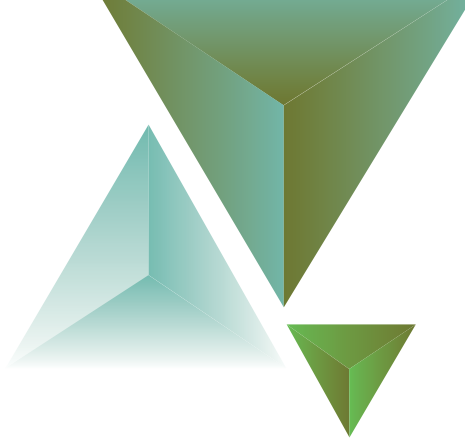
The following represents an overview of the location, service area and ownership of each company:

Name of Company	Location and Service Area	Owner and Management
		Wes-Kaap Moerkwekersvereniging
Sandveld, Southern Cape and Ceres		
		Wesgrow 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 Laboratoriumdienste Wes-Vrystaat Aartappelmoerkwekers KwaZulu-Natal Laboratory Services Noord-Kaap-laboratoriumdienste Solani Labs Dry Bean Producers' Organisation
Mpumalanga, Limpopo, Gauteng and the Eastern Free State		

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

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: Laboratory Services.



The Board of Directors consists of the following persons at present:

Director	Position	Represents the following company or organisation
Mr Johan van den Heever	Chairman	Independent
Mr Jakkie Mellet	Vice-Chairman	Solani Labs (Pty) Ltd
Mr Gerhard Posthumus	Director	Wesgrow Potatoes (Edms) Bpk
Mr JJ van de Velde	Director	KwaZulu-Natal Laboratory Services (Pty) Ltd
Mr Johan van Greunen	Director	Sandveld Laboratoriumdienste (Edms) Bpk
Mr Van der Spuy Botes	Director	Noord-Kaap-laboratoriumdienste (Edms) Bpk
Mr Chris Kleingeld	Director	Dry Bean Producers' Organisation
Dr Fienie Niederwieser	Director	Potatoes South Africa
Mr Rudie Heinlein	Director	Potatoes South Africa
Mnr. Neels Marais	Waarnemer	Seed Traders Forum

The rendering of services in Potato Laboratory Services

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: GO and private material
KwaZulu-Natal laboratory			
Northern Cape laboratory	Bacterial diseases: Wilt (<i>Ralstonia solanacearum</i>)	ELISA	Seed potatoes: Field samples
Only Sandveld laboratory	Golden cyst nematode: <i>Globodera</i> spp.	Seinhorst cyst elutriation	Soil samples
	Virus diseases : PVY and PLRV	PCR	Seed potatoes: Field samples <i>In vitro</i> material

Laboratory	Pathogen	Technique	Type of sample
Plantovita	Virus diseases : PVY, PLRV, PVA, PVM, PVX, PVS, TSWV	ELISA	Seed potatoes: Field and post-control samples Disputes: Nationally, Solani Labs excluded GO-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</i> spp: <i>Pectobacterium carotovorum</i> subsp <i>carotovorum</i> <i>Pectobacterium carotovorum</i> subsp <i>brasiliensis</i> <i>Pectobacterium atrosepticum</i> <i>Dickeya dianthicola</i> <i>Dickeya dadantii</i>	ELISA and conventional plant out methods	Seed potatoes: Field samples GO 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

- *Verticilium dahlia* and *V. albo-atrum*: Verticillium
- *Phytophthora erythroseptica*: Pink rot
- *Pythium ultimum* var. *ultimum* and *P. Debaryanum*: Leak
- *Phytophthora infestans*: Late blight
- *Botrytis cinerea* Pers. :Fr.: Grey mould
- *Phoma foveata* and *Phoma exigua* var. *exigua*: Gangrene
- *Alternaria solani*: Early blight
- *Rhizoctonia solani*: Stem cancer
- *Fusarium spp.*: Fusarium dry rot and Fusarium wilt
- *Alternaria 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

Data in respect of tests conducted in Potato Laboratory Services during the report period 2014/2015

Virus tests					
Type of test	Post-control	Greenhouse tubers G0	Field sample 400 G1 - G3	Field sample 200 G4 - G8	In vitro
Number of samples	2 432	16 079*	2 094***	520	357
Nematode / Bacterial tests					
Type of test	Golden cyst nematode	Greenhouse tubers G0	Statistical (4 605 tubers)	< 4 605 tubers	In vitro
Number of samples	223	117 950*	542	20	435
Diagnostic tests / Bacterial wilt confirmation tests / Disputes					
Type of test	Bacterial (Diagnostic)	Fungi (Diagnostic)	Virus (Diagnostic)	Bacterial wilt confirmations	
Number of samples	18	23	7	37	

*Number of tubers, greenhouse leaf samples excluded

***Store samples included

The addition of PCR technology will offer the opportunity to expand this section further.

Diagnostic samples only refer to samples submitted to Plantovita for diagnostic investigations. A few samples were, however, submitted to the regional laboratories for virus confirmations (PVY and PLRV). These have been included as diagnostic samples.

The management and structure of the Potato Laboratory Services companies for 2014/2015

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 Potato Laboratory Services were as follows:

Name of Company	Responsible Technician	Personnel Composition	Secretarial Services	Administrative and Financial Management	Technical Management
Sandveld Laboratorium-dienste	Soreen Gouws	Laboratory technician Laboratory assistants Contract workers	Hanlie Rabe (agreement with PCS)	Soreen Gouws Board of Directors	Anel Espach Plantovita
Wesgrow Potatoes	Cecilia Bezuidenhout	Laboratory technician Laboratory assistants Contract workers	Wesgrow Potatoes	Gerhard Posthumus	Anel Espach Plantovita
KwaZulu-Natal Laboratory Services	Kyla Anne Watt	Laboratory technician Contract workers	*Robyn van Zyl/ Zelda Wagenaar (agreement with PCS)	Marieta Botha PSA-Finances Board of Directors	Anel Espach Plantovita
Noord-Kaap-laboratorium-dienste	*Susan Linde / Marizelle van der Merwe	Laboratory technician Contract workers	Alana van der Merwe (agreement with PCS)	Andre Coetzee	Anel Espach Plantovita
Plantovita	Anel Espach	Laboratory technicians Laboratory assistants Contract workers Cleaner	*Beverly Palmer/ Marne Brits	Marieta Botha DPO Finances Board of Directors	Anel Espach Plantovita
Solani Labs	Anel Espach Plantovita	Plantovita personnel	SIS Farms	Board of Directorsv	Anel Espach Plantovita

*Resigned / Retired

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 Potatoes South Africa 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 Potato Laboratory Services Group has therefore been obliged to manage its finances and administration under the guidance of the individual boards of directors.

The Technical Committee

The Technical Committee is a committee of Plantovita, the controlling laboratory, representative of Plantovita, Potato Certification Service and Potatoes South Africa and is administered by the Secretariat of Plantovita. The committee consists of the following members:

Entity / Office	Committee Member
Independent Certification Council for Seed Potatoes / Chairman	Dr Dave Keetch
Potatoes South Africa / Manager: Research and Development	Dr Fienie Niederwieser
Potato Certification Service / Managing Director	Ms Sanette Thiar
Potato Certification Service / Technical Manager	Mr Frank Osler
Plantovita and Potato Laboratory Services / Chief Executive Officer	Ms Marieta Botha
Plantovita Potato Laboratory Services / Technical Manager	Ms Anel Espach

If necessary the committee is at liberty to co-opt any other experts to attend a meeting if a specific problem requires specialised attention.

The chairperson of the Independent Certification Council for Seed Potatoes is *ex officio* the chairperson of the Technical Committee. If the chairperson cannot be present, the committee is at liberty to appoint a chairman for the specific meeting from its numbers.

For a meeting to take place at least one representative of Plantovita, Potato Certification Service and Potatoes South Africa respectively needs to be present. Committee members may appoint a proxy to attend a meeting.

The powers, competencies and responsibilities of the technical committee are as determined by the board of directors of Plantovita from time to time. The function of this committee is, *inter alia*, to discuss technical matters which will promote good cooperation and understanding between Plantovita, Potato Certification Service and Potatoes South Africa.

Further functions of the committee:

- To find joint and workable solutions for any shortcomings occurring in procedures in or between Plantovita and Potato Certification Service and able to hamper the smooth course of the certification process.
- To identify needs within the testing and certification processes requiring attention and to suggest guidelines in order to maintain and guarantee the credibility of the whole system.
- To identify pests and diseases, as well as trends, in order to establish precautionary measures and to make recommendations in this regard.
- To identify potential research projects in support of the South African potato industry.
- To advise the Independent Certification Council for Seed Potatoes, appointed as the authority by the Minister of Agriculture, Forestry and Fisheries and, *inter alia*, responsible for the approval of the potato testing laboratories by establishing approval requirements for potato testing laboratories and ensuring that these requirements are applied efficiently and attainably in the interests of the total potato industry, as well as to maintain Independent Certification Council for Seed Potatoes approval.
- To continuously evaluate technical matters in order to ensure that quality and standards are maintained.
- To draw the attention of the respective committees and the authority, where necessary, to any issues or decisions which may affect the scheme, as well as the testing and certification processes or require changes thereto to.

The Technical Committee convenes quarterly and the chief executive officer of Plantovita provides feedback in this regard to the board of directors of Plantovita.

Recommendations are made on a consensus basis and when consensus cannot be reached, the matters concerned are referred to the respective committees in the industry or external expertise is consulted.

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.
- 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

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CHAIRPERSON'S REPORT



RUDI HEINLEIN

CHAIRPERSON

This is my first report as Chairperson of Prokon following my election to the position in November 2014. This is due to the resignation of Mr Garnet Leonard as chairperson and member of the Board towards the end of last year. His resignation left a vacancy for a producer representative on the Board and I wish to report that Mr Human du

Preez, a producer from the Limpopo Province, was appointed to the position. At this point I would like to take the opportunity to thank Mr Leonard for his leadership during exiting but tiring times when we as a board had to take drastic decisions about the future of the company and the road ahead to make it truly competitive in the field of quality

assurance service delivery.

The 2014/15 year will for all intents and purposes be regarded as an extension of the previous year as we continued with the implementation of the business plan based on the strategic direction decided upon during the previous year. And I am pleased to say that the goals we have set for the year all came into fruition.

I am also delighted to report that financially it is going very well with the company. As a result of the expansion in our income base, Prokon's income have grown to more than R9.2 million for 2014/15 which is up on the year on year growth we have seen over the past few years. It also left us with a small profit of just over R388 000 which is well in accord with our status as a non-profit company. We have once again received an unqualified financial report from our external auditors. This is a clear indication of our adherence to Prokon's financial policy and consequently that strict financial control is bearing fruit. In this regard I wish to extend a special word of thanks to the Mr Stanley de Lange, chairperson of our Audit Committee, for keeping the reigns tight.

Potatoes are still our main business and therefore biggest money earner, but the Prokon we use to know it is long gone and is fast becoming a major role player in the fresh produce quality assurance business.

This position has been attained by continuously marketing our services, by rendering dovetailed services and by ensuring that the company and the personnel are equipped to render services of the highest standard. A perfect example of the latter is our application for accreditation with SANAS. Unfortunately this is a long and arduous process, but once Prokon has received accreditation – which we shall – a lot of doors will open for us to extend our footprint in the field of quality assurance.

When saying our personnel is our biggest asset, we are not paying lip service. It is for this reason that Prokon has implemented the necessary adjustments to the salaries of our quality assurance personnel to ensure that it is in line with what is being paid in the field. That we have managed to stem the outflow of qualified quality assurance personnel is, in my opinion, one of the big plusses of the year under review.

The adage *knowledge is power* also holds true for Prokon. Apart from ensuring that its own personnel have

the knowledge to render quality services, we are sharing knowledge with other stakeholders in the fresh produce industry. Examples thereof are the e-training courses offered via Prokon’s website, being involved in training courses offered on the Joburg Market to black small scale farmers, providing pack house training and showing black farmers participating in Potatoes South Africa’s enterprise development program the ropes on inspecting potatoes on a fresh produce market.

As a result of the spike in potato production the number of consignments received on the market and the number of bags inspected increased compared to the previous year’s figures. In respect of 2013/14, 41 415 consignments were received and the number of bags inspected amounted to 95 011 561. As far as 2014/15 is concerned the consignments received were 42 185 and the number of bags inspected 99 688 183 bags – an increase of nearly 4.7%. Although the quality of potatoes delivered during 2014/15 was good, the increase in the number of under mass bags

left much to the desired and should be regarded as a serious warning signal for the potato industry. Prokon can point out the problem, but we as potato farmers must rectify it.

In the 2013/14 Potato Industry Report it was reported that about 2 000 trade inspections were conducted. In respect of 2014/15 the number of trade inspections increased to 2 671, another clear indication that business is booming at Prokon.

In conclusion I wish to extend an invitation to you as producers to visit Prokon on the markets when your crop is being marketed. It will give you a better understanding of the benefits the inspection service hold for your potatoes in particular and also for the industry as a whole. In addition make use of the information and statistics available on the Prokon website (www.prokonsa.co.za), it will be worth your while – especially during your marketing season.

My gratitude goes to the board of directors and the personnel of Prokon. Thank you for your sterling work and dedication during 2014/15 to make Prokon one of the best quality assurance bodies in the country!

Rudi Heinlein
Chairperson



“Potatoes are still our main business and therefore biggest money earner, but the Prokon we use to know it is long gone and is fast becoming a major role player in the fresh produce quality assurance business.”



CHIEF EXECUTIVE OFFICER'S REPORT



ETIENNE BOOYENS

CHIEF EXECUTIVE OFFICER

The 2014/25 year under review will be remembered as an epoch when change happened fast for Prokon as a service provider in the fresh produce milieu. The tempo at which we implemented the second phase of the approved business strategy meant that the board and administration had to shift-up a gear to keep abreast. This can primarily

be ascribed to the extension of services because of Prokon's larger role as assignee of the Department of Agriculture, Forestry and Fisheries for the application of the potato grading regulations and the increase in the delivery of quality related inspection services to other role players in the South African fresh produce industry.

As far as potatoes are concerned 42 185 consignments (99 688 183 bags) received on the fresh produce markets, were inspected. In addition 1 149 trade inspections were conducted at distribution centres and 1 522 at shops that are supplied with produce by the centres.

The commercial business of Prokon comprised of:

- Quality inspections on peaches, nectarines, plums, prunes and apricots on behalf of the South African Stone Fruit Organisation.
- Quality inspections on mangoes on behalf of Subtrop.
- Ripeness tests on avocados and wastage study on behalf of the SA Avocado Growers Association.
- Quality inspections on locally produced and imported garlic on behalf of the SA Garlic Association.
- Quality assurance and health service to certain fresh produce markets.
- Offering e-training courses on quality related aspects via Prokon's website.
- Services rendered to Potatoes South Africa –
 - Providing information such as volumes of potatoes per region delivered to fresh produce markets, including the different classes of potatoes, cultivars and the volumes down-marked.
 - Pack house training.
 - Paper and packaging tests.



The extension of Prokon's service delivery portfolio not only brought about more work, but also had a significant impact on the company's financial position. The income for the year under review amounted to R9 226 183 which represents an increase of 14% compared to the previous year's income. This allowed us to convert the previous year's deficit into a profit of R388 188. Admittedly this is not a bank breaking profit, but if it is taken into account that the new service delivery portfolio placed huge demands on Prokon's available funds and reserves to gear itself in

terms of equipment and vehicles, it remains a welcome financial position.

Although the official inspection fee paid by potato producers is still Prokon's main source of income, the services rendered to the potato industry is increasingly being subsidised by the income received for commercial services rendered to other institutions.

Prokon's main income source has received a further nudge as a result of the instruction by the Department of Agriculture, Forestry and Fisheries

that inspections on potatoes should be extended to distribution centres and retail trade shops to which the aforementioned deliver. In addition the increased number of potato consignments sold on the fresh produce markets during the year under review, also left a positive mark on the monies received.

However, it is gladdening to be able to report that the income Prokon earned through the delivery of





“The extension of Prokon’s service delivery portfolio not only brought about more work, but also had a significant impact on the company’s financial position. The income for the year under review amounted to R9 226 183 which represents an increase of 14% compared to the previous year’s income. ”



inspection services to fresh produce bodies and the delivery of other quality assurance related services to some fresh produce markets reflected a noticeable increase. The impact of the earnings from the aforementioned inspections and quality assurance related services should not be regarded as insignificant, especially if taken into account the bigger contribution it makes to finance Prokon's infrastructure. For the potato producers it meant that there was not pressure to increase the official inspection fee on potatoes above the current CPI coupled level.

Prokon has once again received an unqualified report from its external auditors, Fourie + Botha, following the auditing of our financial records for 2014/15. It is also important to report that Prokon has changed from financial service provider during the year under review. Although there were initially a few teething problems as to be expected, it is nice to report that everything is now running smoothly.

Prokon has 54 personnel members of which 24 are quality controllers who render inspection services on the national fresh produce markets, and 26 assistants who help the aforementioned in the execution of their duties. This means that less than 8% of the personnel render the necessary administrative support services, which in my book is a very healthy ratio. As a result of the board decision to adjust the remuneration of the quality controllers market relatedly, we have experienced very little staff turnover. This is especially gladdening in view of the time and money invested to train

quality controllers and the additional responsibilities they have to shoulder because of the extension of services. In order to grow the business the extension of service is a must. This not only applies to service delivery to the potato industry, but also in respect of the other fresh products in the agricultural sector. As a result we are constantly looking for opportunities on offer. However, in order to be able to extend its service base, Prokon has to be geared for it. It is for this reason that we are in the process of applying for accreditation with SANAS. It goes without saying that the bigger Prokon's footprint is, the bigger the benefit for the consumer, and by implication the producers and the industries.

The 2014/15 year under review was good one for Prokon, but it did not happen automatically. It is the result of hard and persevering team work by the board and the personnel. My thanks goes to everybody who contributed to our success with a special word of thanks going to Mr Garnet Leonard, previous chairperson, Mr Rudy Heinlein, current chairperson, and Mr Stanley de Lange, chairperson of the Audit Committee for leadership and guidance.

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 services the company render can be categorised as follows:

- Assignee of the Department of Agriculture, Forestry and Fisheries in respect of potatoes.
- Commercial services rendered to Potatoes South Africa.
- Commercial services rendered to other institutions in the fresh produce industry, for example in respect of stone fruit, avocados, mangoes, garlic and citrus.
- Knowledge transfer.

The personnel

In order to render the above services Prokon has 54 personnel members in its employ, of which of 24 are quality controllers who render inspection services on the 17 national fresh produce markets, and 26 assistants who assist the aforementioned in the execution of their duties.

Service delivery as assignee of the Department of Agriculture, Forestry and Fisheries in respect of potatoes

Service delivery to the potato industry

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

In terms of the appointment Prokon renders a comprehensive inspection service on potatoes which means that the quality and standard of the marketable product are controlled in accordance with the directives of the regulations. This ensures that value is added to the benefit of the producers as well as ensures that consumers are assured of a quality product.

The inspection service is backed by a data base that is continuously maintained with the latest information which is confidentially made available to producers on a daily basis. The information is also made available to Potatoes South Africa in a processed format that allows the organisation to identify and address problems in good time.

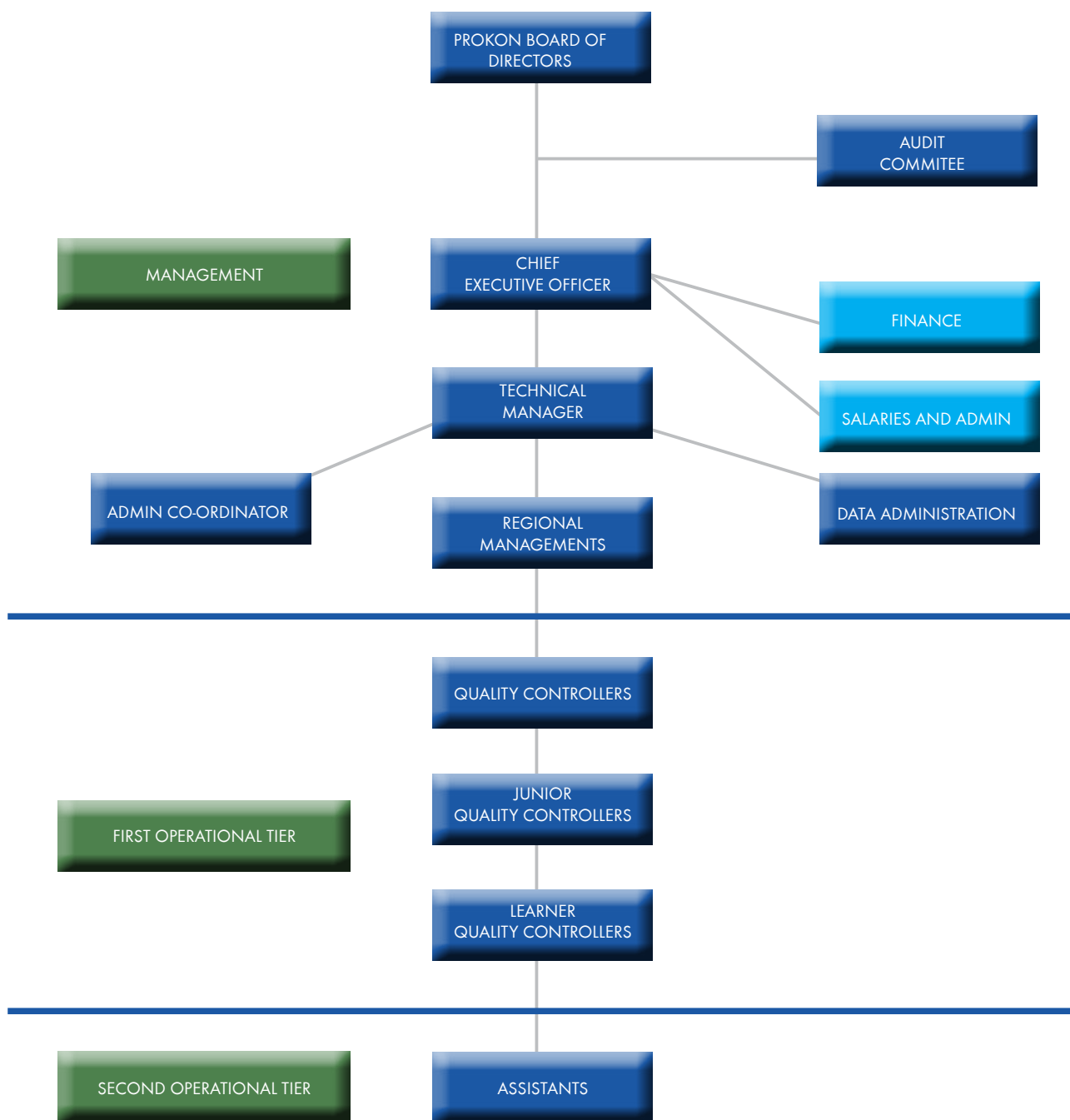


Figure 1: Company Structure

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

- Personal contact with the producers to ensure that consignments comply with the prescribed regulations. This was done by providing continuous information on the quality of the produce as well as on matters pertaining to the packing, marking and mass requirements.
- Making available statistics on:
 - Classes
 - Size groups
 - Packing sizes

The above services allows the producer to better manage the marketing of his potato crop and also ensures that his trade mark represents quality that contributes to increased demand for his product and which inevitably holds financial benefits. Herewith cognisance should be taken of the fact that quality and stock levels are the primary price determiners on the fresh produce markets which makes the services rendered by Prokon that much more important. In addition the services ensure that the buyer and the consumer are assured of a product that complies with the prescribed requirements.

Potato inspections on markets

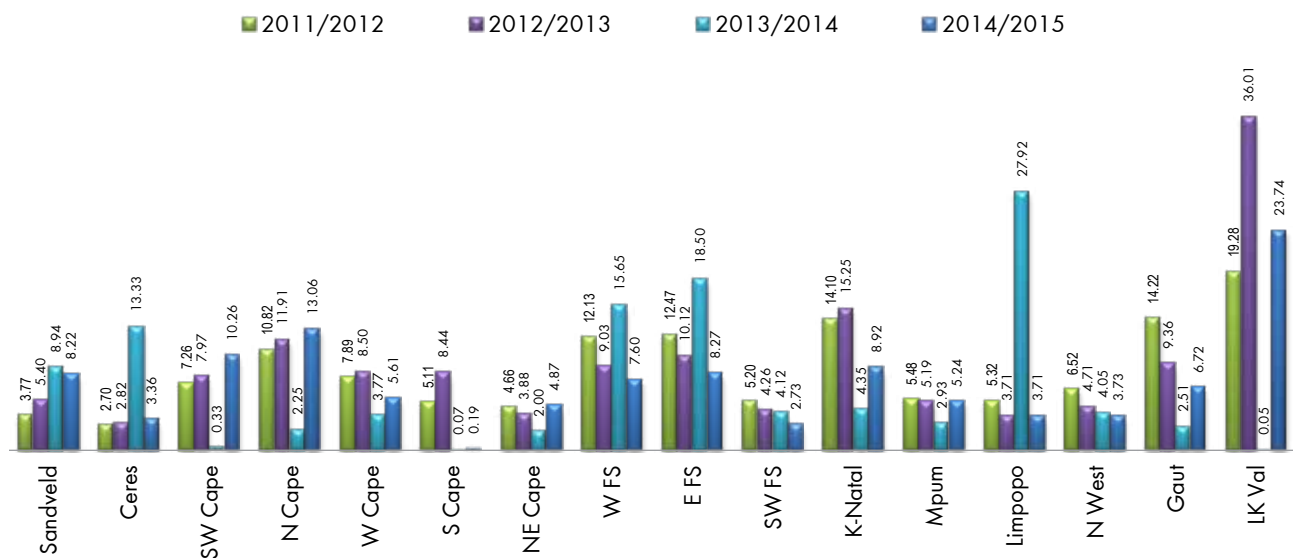
During the year under review Prokon inspected 42 185 potato consignments (99 688 183 bags) on the fresh produce markets received from 16 different production regions.

The three main regions in terms of 10 kg consignments delivered were:

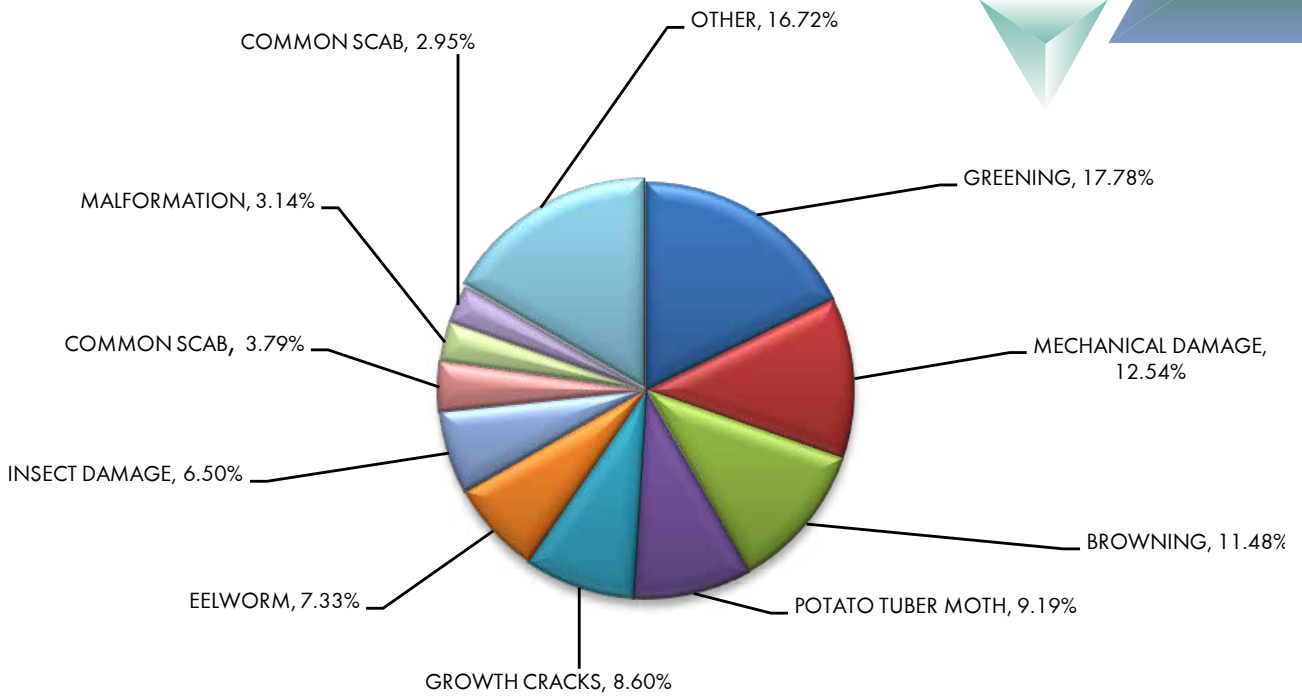
- Limpopo - 24 617 871
- Eastern Free State - 16 064 255
- Western Free State - 14 215 049

The majority of consignments received and inspected were of the high quality. Only 6.74% of consignments were down marked to a lower class. Unfortunately under mass consignments were a significant problem.

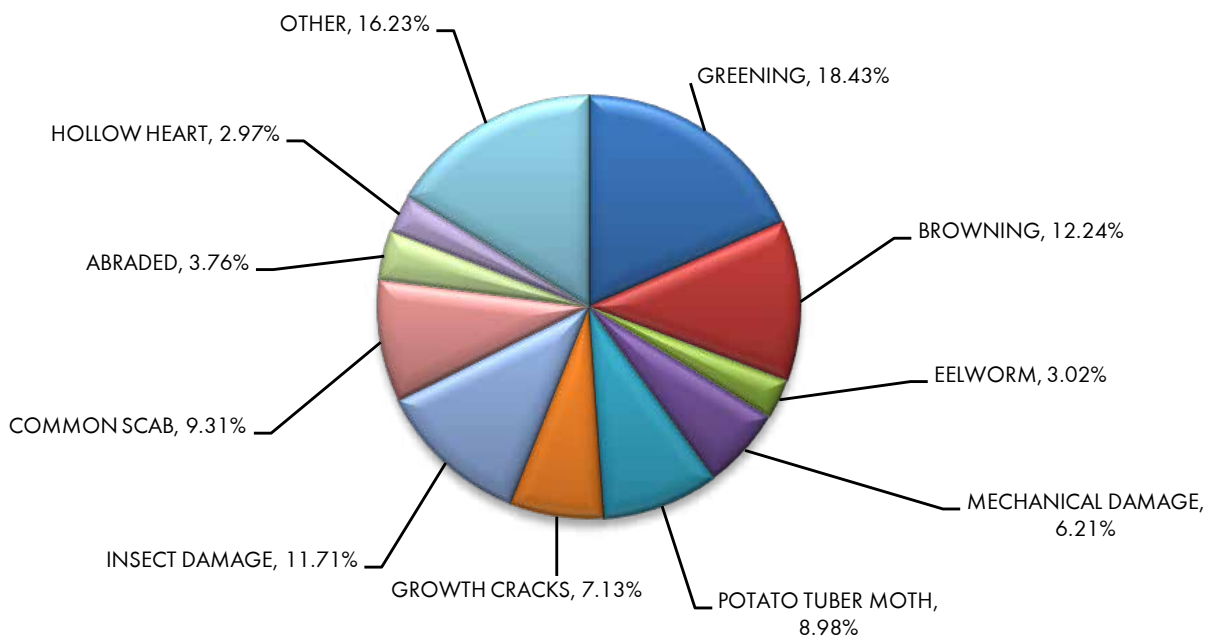
Reasons for down-marking



PERCENTAGE OF POTATOES DOWN-MARKED PER REGION FOR 2011/2012, 2012/2013, 2013/2014 en 2014/2015



COMPARATIVE REASONS FOR DOWN-MARKING ON ALL MARKETS AND ALL REGIONS 2013/2014



COMPARATIVE REASONS FOR DOWN-MARKING ON ALL MARKETS AND ALL REGIONS 2014/2015

The three main reasons for down marking per region are as follows:

	Common scab	Mechanical damage	Greening	Browning	Eelworm	Growth cracks	Wilting	Water-grass
Sandveld		8.61		53.48				
Ceres		20.15		30.54				
South Western Cape				47.96				
Northern Cape		8.30	12.11		49.86			
Eastern Cape		12.41	36.18					11.11
Southern Cape		100						
North Eastern Cape		24.05	25.11					
Western Free State		7.50	40.07			11.99		
Eastern Free State		12.52						
South Western Free State		21.89						
KwaZulu-Natal								
Mpumalanga			13.02			25.71		12.05
Limpopo			32.82			16.84		
North West					11.00			
Gauteng	19.48	13.39	15.81					
Loskopvaley		23.87	18.56	32.61				

*Other: Refers to reasons for down-marking other than the three main reasons given in the table

Potato trade inspections

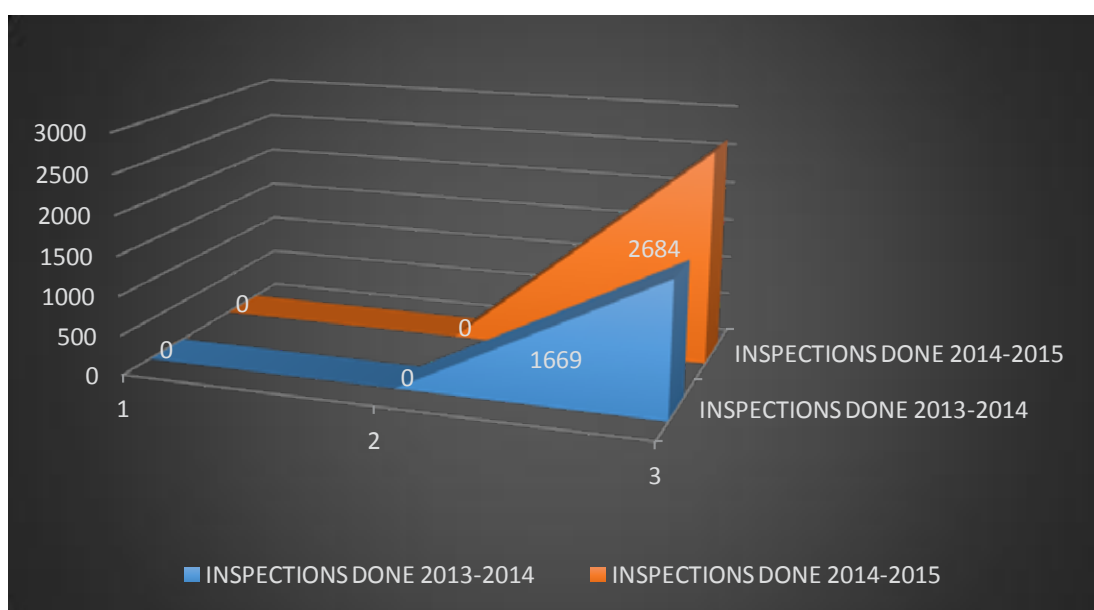
During the year under review 1 149 trade inspections on potatoes were conducted at distribution centres and 1 522 at retail outlets in accordance with the decision taken by the Department of Agriculture, Forestry and Fisheries in 2013 to extend the inspection service. The inspections entail three monthly visits to every distribution centre and five outlets being supplied by each of the distribution centres.

The department took the decision to ensure that as many fresh produce points of sale as possible in the supply chain comply with the prescribed marking and quality requirements in order to guarantee that the consumer continuously receives quality potatoes.

To ensure the success of the inspection service, directives were issued in cases where distribution centres and retail outlets did not comply with the quality and marking requirements. Such directives were followed-up with visits to ensure that the problems were rectified. The non-compliance with the marking requirements is the biggest problem and is ascribed to the ignorance of shop management in so far as what information should be reflected on the bags after repacking. Regular reports have been submitted to the distribution centres to ensure that they are firstly aware of the situation and secondly are in a position to take corrective action.

Insect damage	Abraded	Potato tuber moth	Decay	Hollow-heart	Size	Internal brownfleck	Other *	Total degraded
				7.88			30.03	8.22
		26.88					22.43	3.36
	16.65	7.89					27.5	10.26
							29.73	13.06
							40.3	5.61
							0	0.19
			12.95				37.89	4.87
							40.44	7.6
14.18		22.16					51.14	8.27
		8.01	10.01				60.09	2.73
	12.59	12.00			16.56		58.85	8.92
							49.22	5.24
	7.28						43.06	3.71
				13.96		17.29	57.75	3.73
							51.32	6.72
							24.96	23.74

Distribution centre and shop visits – comparative figures 2013/14 and 2014/15



INSPECTIONS 2013-2014/2014-2015

Commercial services rendered to Potatoes South Africa

Provision of information

The information downloaded onto Prokon's data base, has been provided to Potatoes South Africa's Department: Industry Services on a regular basis which is required by the latter to render its trade related duties. The information includes the potato volumes delivered per region to the fresh produce markets, inclusive of the different classes of potatoes, cultivars, the volumes down-marked and the relevant reasons, as well as disease occurrence.

As part of the service monthly reports on the volumes delivered by a specific region, together with the reasons for down-marking, and the percentages of potato consignments down-marked, were sent to the regional personnel of Potatoes South Africa. This information allows them to discuss the problems that are unique to a specific region with the producers, and to recommend corrective action.

Pack house training

Pack house training were provided on request during the year under review. In order to make the course content as comprehensive as possible, emphasis was placed on food hygiene and food safety.

The course covered the following aspects:

- Why quality control on fresh produce markets is necessary,
- The potato regulations. Colour plates were used for illustration purposes to facilitate the transfer of the information.
- Harvesting and processing:
 - Reasons for the washing process and quality of the wash water.
 - Drying process and aspects to take into account.
 - Sizer and the correct setting thereof as well as the flow tempo for optimum operation.
- Sorting on the sorting table.
 - Identification of the different size groups and corrective action to ensure uniformity.
 - Identification of the correct form in the correct class.
 - Identification of defects and classification of potatoes.
- Marking requirements.
- Correct mass and closing process.
- Packing of pallets and storing.
- The importance of every worker and his contribution in the total marketing process.
- Food hygiene and food safety.

All the pack house workers who attended the training course, received a Prokon certificate upon completion thereof as prove of attendance.

Paper and packaging tests

As a result of complaints received from potato producers regarding the inferior quality of potato bags provided by some bag manufacturers, Prokon was contracted by Potatoes South Africa to conduct paper and packaging tests.

The outcome of the test resulted in the compilation of guideline specifications for paper used for the manufacturing of potato bags. The majority of paper suppliers and bag manufacturers have sign a code of conduct according to which they will abide by the guideline specifications. A logo has also been design for inclusion on those bags that comply with the specifications.

Prokon has also been contracted to handle all bag breakage related complaints.

Commercial service delivery to other institutions in the fresh produce industry

Fresh produce markets

Quality assurance on markets

Prokon provided a quality assurance service to the Kimberley, Klerksdorp and Vereeniging Markets. The service entails quality assurance on all fresh produce and the application of marking requirements as prescribed by the relevant regulations. Attention was also afforded to general hygiene on the market floor. The market authorities were given daily reports together with recommendations on rectifying the problems.

Health services on markets

Prokon also provided an independent health service to Kimberley, Klerksdorp and Cape Town markets. The service entailed the inspection and writing-off of products which quality has deteriorated to such an extent that it is no longer suitable for human consumption.

Other fresh produce industries

Prokon provided services to the following fresh produce industries / institutions:

South African Stone Fruit Organisation	Quality inspections	Peaches, nectarines, plums, prunes and apricots
Subtrop	Quality inspections	Mangoes
SA Avocado Growers' Association	Ripeness tests and wastage study	Avocado's
South African Garlic Association	Quality inspections	Locally produced and imported garlic

Knowledge transfer

Prokon was involved in information transfer to small holder black potato farmers and students on three occasions:

- In cooperation with RSA Market Agents, Prokon provided training to a group of black small holder farmers at the Joburg Market. Prokon was responsible for the training on grading, packing and marking of potatoes. The course also made provision for training on the market process, liaison with market agents, daily communication with producers on current market prices and market stocks, the commission structure and the payment arrangements that apply to





produce sold on the market on behalf of the producers.

- During a visit to the Tshwane Market by a group of potato producers participating in Potatoes South Africa's business development program, Prokon provided the producers with an overview on the importance of quality assurance in order to ensure that the product sold on the market complies with the necessary health and quality requirements, and is therefore suitable for human consumption. To add further value to the visit a full inspection on a potato consignment was conducted.
- During a visit to the Tshwane Market by bursary students of the Potato Industry Development Trust, Prokon provided an overview on what a quality inspection on potatoes entail with the emphasis on the benefits it holds for the producers and the consumers. A full inspection on a potato consignment was also conducted.



Image building and marketing of services

To promote its image as a primary service provider in the field of quality control, Prokon made use of various mediums. Examples thereof include:

- *Liaison with role players in the fresh produce industry*

Prokon places a high premium on liaison to extend its client base. Consequently numerous meetings were held with role players in the fresh produce industry to market the specialist services Prokon has to offer. This includes meetings with existing and potential clients as well as with government institutions.

- *Potato data base*

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

Information on the following was most in demand:

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

Additional information that is available includes diseases and defects as well as statistics on down-marking and the relevant reasons.

The tracing of diseases and pests during inspections cannot be emphasised enough. This information was made available to potato researchers and the industry with a view to, inter alia, implement preventative control measures. The value lies especially in the fact that the origin of the disease or pest can be traced backed to farm level.

- *Articles in Chips*

Articles on potato deliveries per production region to the fresh produce markets were published in every edition of the industry magazine CHIPS. During the year under review several articles that relate to the activities of Prokon were also published with the emphasis on the value it holds for the reader. These articles are also available on the Prokon website.

- *Prokon website*

As is the case with all companies, Prokon duly accepts that electronic liaison is imperative to promote its image and to convey information. As a result Prokon is continuously busy revamping its website www.potatoes.co.za to increase its user value and to make it more user friendly.

