

2020/2021

ANNUAL REPORT

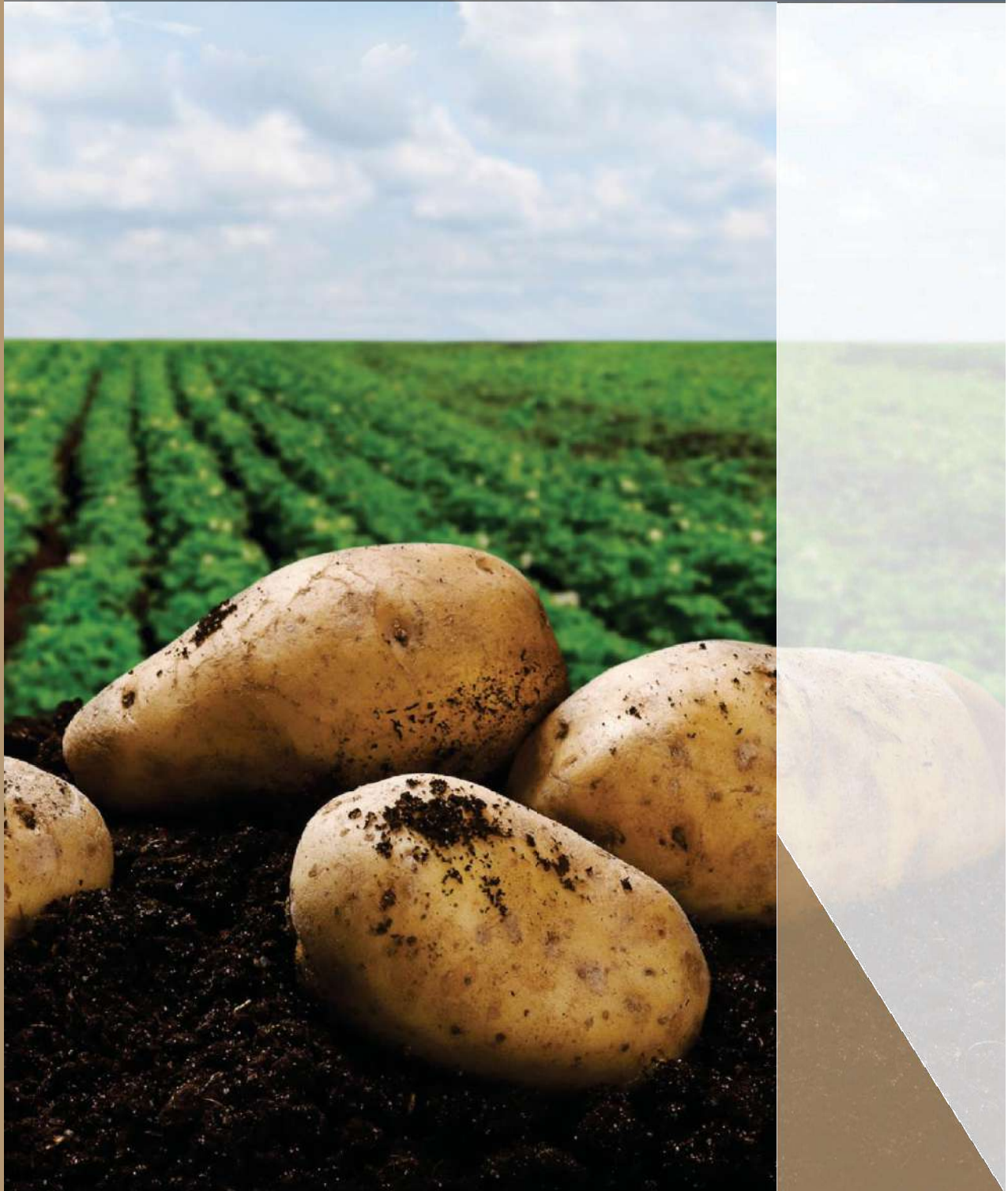


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ABOUT POTATOES SA

Potatoes South Africa (PSA) is a Non-profit Company ((PSA (NPC)) under the Companies Act 71, 2008 (Act 71 of 2008).

MAIN OBJECTIVES:

- Serve as the mouthpiece of the South African potato producers;
- Establish and maintain a central representative body called the Potato Industry Forum;
- Institute and endorse the maintenance of a national Potato Industry Development Trust which shall collect, distribute and govern industry levies in accordance to statutory strategies as set out in the government notices;
- Structure any business activity or service in such a manner that financial interests and results are transparent and are made available to all interested parties independent of PSA;
- Strive for the systematic development and environment friendly outlook of the potato industry, including, inter alia, the preservation of the soil and water resources, the maintenance and improvement of the fertility of the land and improvement of production and marketing methods.

VISION



Together towards excellence in the potato industry.

MISSION



- To provide strategic support services to a dynamic industry, thereby enhancing the sustainability of potato producers in South Africa.
- By providing the industry with industry-strategic knowledge and management support and support services with regard to South Africa's potato consumption.
- Providing producer development support services and business excellence.

VALUES



PSA pursues excellence in the following ways:

- Proactive
- Integrity
- Impartial
- Service excellence
- Collaborative





CHAIRPERSON'S REPORT

During the 2020/2021 financial year, the Covid pandemic persistently continued to play a major role in pushing the economy into recession. Lockdown levels 4 and 5 had an adverse effect on availability of labour, attainability of input commodities as well as logistics. Increases in fuel prices, minimum wages, and rising costs for the consumer, contributed to a further tightening squeeze on the economy.

On top of these economic challenges, nature also took a toll from producers with ravaging veld fires and frost damage in various production regions. To those in the potato family who lost loved ones or suffered damages to their livelihoods, we keep you in our prayers.

However, the South African agricultural sector maintained its resilience. Our potato farmers continued to produce sufficient volumes 12 months of the year to meet local demand. Although prices increased as a natural reaction due to lower volumes caused by adverse weather conditions such as frost and too much rain, potatoes remain one of the most readily available food sources.

In a drive to aid potato producers in optimising their production, PSA sharpened its focus on smarter information dissemination protocols. The importance of sustained and improved contact between PSA and producers therefore became paramount.

On 01 July 2020, PSA entered the 2nd year of the 5th Statutory Period. PSA, as an industry association, has the mandate to provide an institutional framework for the implementation of national, regional and workplace strategies.

It is further tasked to provide a framework for the functioning of a voluntary representative autonomous national organisation for the potato producers of SA. For PSA to continue to fulfil this role, an increase in statutory levies needs to be tabled.

The status of statutory levies is determined by a vote of delegates at the biennial PSA Congress which would have taken place in September 2021. Due to the risk posed by Covid, a hybrid virtual "mini" Congress was held in March 2021 with a vote to postpone Congress 2021 by 12 months to September 2022.

On behalf of PSA and industry, I would like to thank the Potato Industry Development Trust (PIDT) for their diligence in ensuring that the structure and all activities of PSA are conducted in such a manner that financial interests and results are transparent and are made available to all interested parties independent of PSA. The PIDT's rigorous oversight of PSA's application of statutory levies is highly commendable and resulted in a clean audit for the year under review.

PSA cannot perform its role without the staff. Dynamic organisations are characterised by fluidity in a skilled and competent workforce. As such, several staff changes took place in PSA during the 2020/2021 financial year.

Three internships were filled, three permanent appointments were made, two members of staff were transferred within the organisation and one temporary appointment was made.

We are saddened by the resignation of three key members of staff. Dr André Jooste, Chief Executive Officer (CEO), resigned in November 2020 after 9 years of service to the potato industry. He made significant contributions amongst others, towards safeguarding measures for industry. He established a legacy in PSA and laid foundations for a new dispensation, not only in the potato industry, but to the benefit of the broader agricultural industry. André, we trust that you will make a difference wherever your career takes you.

Monica van der Merwe, Personal Assistant to the CEO, resigned in September 2020. She masterly made things happen and knew most of the role-players by name and understood their respective needs. Monica brought finesse to the execution of many tasks and orchestration of events in PSA. Monica, you had your finger on the pulse and often set the pace in the organisation. You are sorely missed.

Pieter van Zyl, Manager Information, resigned in June 2021. Pieter was well known throughout industry and will be remembered for launching innovative projects, standing by his principles and his unique sense of humour. Pieter, thank you for your tireless hard work and loyalty. You laid foundations in the potato industry information sphere on which others can build monuments.

We wish all three of them success in their further endeavours and appreciate their loyal dedication to the organisation, industry as a whole, and the potato producers in particular. I want to commend Willie Jacobs who took over from Dr André Jooste on 18 January 2021. The potato industry is privileged for Willie to have accepted the position of CEO at PSA. In the few months since his appointment, Willie, with his expertise and experience as agricultural economist, has already successfully embarked on building and expanding the dynamics of PSA.

To the team at PSA – the Potato Team, I would like to express my sincere appreciation for your diligence. We are blessed to have you as such strong and valuable assets.

Despite Covid related restrictions, role players in the potato industry participated in the Potato Industry Forum in April 2021. Your involvement in matters pertaining to the future of the potato industry is highly appreciated.

To the PSA Board of Directors, who selflessly give their time and expertise to serve the industry and guide PSA, your inputs are valuable beyond compare.

We cannot thank our potato producers enough through deep gratitude for your tenacity and perseverance in these most trying times. Thank you for continuing to provide one of the most affordable and nourishing food crops to the people of this country. As a collective force, all of us who form part of the potato milieu have proven during the past year that where there is willingness and determination, there is a way to succeed - no matter how severely we are tested.

With my utmost respect,

JF van der Merwe
Chairperson



The year under review will go down in history as the year all historic reference points was challenged. Since the beginning of 2020 producers in the potato industry had to adapt several times during their production seasons to Covid-19 regulations. In order to adhere to social distancing, many producers have been implementing work shifts by extending operating hours in their packhouses, a step which necessitates greater pressure on all resources, including electricity usage.

Despite Covid-19, and according to data from Agbiz and the Bureau for Food and Agricultural Policy (BFAP), South Africa's agricultural sector performed relatively well in 2020. The sector's gross value is estimated to have expanded by between 10% and 13% and it is worth noting that potato production yields at least R6.6-billion for the country's economy. These gains also allowed for employment opportunities in the sector, with overall agricultural jobs standing at 810 000 in the last quarter of 2020, down marginally by 8% from the same period in 2019.

The agricultural sector was but one of a few that managed to hold its own during and after the major Covid-19 lockdown periods. The minimum wage increase earlier in the year, along with electricity price hikes, had a significant effect on the potato industry. Yet, having faced various challenges in 2020, the potato industry still contributed positively to South Africa's farm economy, employment, and food security. This is evident in the per capita potato consumption in South Africa which has increased markedly in the last ten years, proving the powerful impact that the staple food has in the country. Potatoes helped ensure food security throughout the pandemic in South Africa last year.

However, if the agricultural sector is to stimulate South Africa's economy, all-round and continued involvement from all role-players will be required to optimise the potato industry's impact.

Potatoes, like all other fresh produce, are sold through multiple channels, with national fresh produce markets being the main driver of fresh produce sales. However, during Alert Levels 5 and 4 of lockdown, the restrictive regulations limited trade, thereby inspiring traders and producers to find direct ways of connecting. Volumes recorded by PSA (under the levy requirements) revealed a migration from national fresh produce markets to direct transacting.

Furthermore, potato consumers still see potatoes as a good value proposition, compared to substitute products, which offer good support for the price of potatoes. It is also important that the consumer understands that there is a group of people who have their hearts and souls invested in our country to provide food. These people are our producers, and not only is their goal to provide food - it is also they who keep rural communities going.

Towards our existing potato producers, we hence express our sincere appreciation. At PSA we see and understand the difficult circumstances under which you sometimes have to keep producing and we assure you - it does not go unnoticed. South Africa needs you and from PSA's side we will continue to assist and facilitate, as and where necessary. We can indeed assist you with the economy of your business and can help facilitate the demand for a good product. Hold on tight, persevere – the market is ready for you.

For those who want to venture into potato production, there is still secure space for new entrants into the potato market and PSA is there to actively support those entrants with advice. Potato production is a complex business because it is a complicated crop. I want to be as bold as to say that potato production is perhaps more of an emotional challenge than facing a climate challenge.

Potato production requires huge capital input and if one wants to produce table potatoes, a farm is not all that you need. A lot of capital and inputs are required to establish packhouses and other important facilities. At PSA we have all the technical knowledge required to support a novice producer.

PSA focuses pertinently on one of the largest factors affecting the market price of potatoes, namely the line of communication between what happens in the production environment, as opposed to what the markets need. More interaction is required and there should be a better understanding of the seasonal nature of the industry and how it works.

It is important that we know when shortages are expected and that we find ways to bring about price stability for both the consumer and the producer. Not only will it improve the economy of the industry - it will also positively affect the consumer's pocket. Producers, as marketers and business owners, must also understand all the factors that have an impact on their businesses by making informed decisions for themselves. PSA knows that communication with the producers is thus very important. For this reason, communication tools, such as WhatsApp, are used to exchange information, for instance marketing periods of different production regions.

Where lack of reliable information could be both the biggest threat and the most promising opportunity, optimising data technology can unlock huge potential for one of the country's favourite foods. In this, PSA embraces technology to fulfill its role as industry body.

On 30 June 2021, the second year of the fifth statutory period ended. PSA (NPC) as an administrator, collected R48.5 million on behalf of the Potato Industry Development Trust (PIDT) in statutory levies during the 2020/2021 financial year and PSA (NPC) managed to meet the prescripts given by the Minister. We are pleased to announce that the Audit for 2020/2021 resulted in a clean report.

As part of its managerial responsibilities, PSA (NPC) is also accountable for the implementation and management of the Core Business projects accepted by PSA's Board of Directors and approved by the PIDT. The four Core Businesses of PSA are subsequently geared to deliver outputs in aid of sustainable optimal production and consumption of potatoes.

The continuous input cost-squeeze demands high marketable yield as counter-measure. PSA's Research Core Business is focused on the identification of improved cultivars to increase yield potential. Research on water and nutrient use aims to reduce the limiting factors whereas research on pests and diseases aim to address the reducing effect on yield.

Despite covid restrictions 14 on-farm trials were carried out successfully. Product trials were conducted by the Eastern Free State Work Group under controlled conditions (fertiliser, spraying, etc). PSA remains responsible for trail lay-out, planting, harvest, data analysis and reporting. This is important for farmers because the trials are objective through a scientific evaluation of fertiliser and plant protection products, giving farmers peace of mind that products perform as claimed. Cultivar exhibitions after results have been analysed which make it possible for farmers in the region to evaluate the quality of the tubers of the cultivars put to trial under commercial conditions in the climate prevailing in the region.

Research on the sustainability of irrigation in the Sandveld involved co-operation in funding from various industry bodies, research partnerships with different institutions and co-workers in the Sandveld. This is Pioneering research, addressing national and international concerns and is the only study of this nature on potatoes in the world. The research required sophisticated instruments and large amounts of data. Results showed that in most of the 9 case studies, water and nutrients are used efficiently. This research also highlighted the risk of over-irrigation in the rainy season.

Research on diseases such as leaf blights (early blight and brown spot) brought to light that there are 4 *Alternaria* species causing blights in South Africa – not 2 as previously thought. Fungicides are used to control early blight and brown spot. However, a loss of sensitivity of *Alternaria* to fungicides has been reported in countries in the northern hemisphere.

The question then is: Are the fungi in SA still sensitive to fungicides to afford good control? After one year's research, signs of loss of sensitivity to two fungicides were shown. The results were communicated to not only farmers, but also to plant protection companies to enable them to position their products so that the development of tolerance of *Alternaria*

to these fungicides can be avoided. Research on diseases such as these is important and confirms that dependency of fungicides means that we cannot afford to lose valuable chemistry.

Market intelligence forms the backbone of decision-making. Subsequently PSA (NPC) constantly seeks to better align the sources and range of information with the needs of the industry. The objective of the Information Core Business is to make information - and more importantly intelligence - available to producers. This empowers them to make strategic and tactical decisions to optimise the sustainability of their potato farming.

Although with 570 producers across 16 regions of production, the potato industry provides employment for between 50 000 and 60 000 people, the industry remains largely untransformed, considering that only 1% of the country's production comes from black-owned farms. Despite having proved resilience last year by producing 2.6-million tonnes, the South African potato industry appeals to stakeholders to form more partnerships to drive growth and transformation.

Additionally, owing to the rotational crop requirements of potatoes, producers need at least 20 ha of land to plant 5 ha of potatoes. PSA (NPC) regularly collaborates with banks, input suppliers and off-takers to support New Era farmers.

The Transformation Core Business therefore continued to forge partnerships with other stakeholders to advance these goals of successfully settling New Era farmers. Collaboration with processors for example, provided farmers without packhouse facilities the opportunity to access a market for their product.

During the financial year under review, the Transformation Core Business assisted in the development of black potato farmers to commercial farmer level through its Enterprise Development Programme. In the year under review, fewer farmers were targeted in the Enterprise Development Programme to better support and develop them to commercial level.

One of the approaches is to consider the farming business holistically, not just focussing on potatoes. People who are already farmers with access to necessary resources were

targeted. The wholistic farmer development approach is enforced with skills development through mentorship and training of which on-farm mentorship support is integral to the Enterprise Development Programme. Furthermore, industry related training on DVD's were released in 8 languages and distributed at various agricultural related events. Business mentorship for farmers on the programme was introduced in the current year and accounting services in support for farming enterprises were provided.

A total of 20 farmers with a collective 287 hectares participated in the programme during 2020/2021. Four of these farmers serve on the PSA Board of Directors.

The Transformation Core Business focuses on socio-economic development through its Small Holder Development Programme. The purpose is to disseminate production and business information through demonstration trials, thereby addressing food security and developing a pipeline for Enterprise Development projects.

In the Bursary Programme of the Transformation Core Business 46 post-graduate and 78 under-graduate students were accommodated. The post-graduate component of the Bursary Programme is aimed at making a contribution towards ensuring that there are enough graduates to address the relevant research areas affecting the industry as well as increasing the industry's pool of appropriately qualified scientists. The Research Core Business, together with the Transformation Core Business, are jointly responsible for funding and identification of postgraduate students.

PSA's Strategic Marketing Model is vested in the intent to position potatoes as a tasty, convenient and versatile product that is at the forefront of ground-breaking fresh produce marketing innovation. The model is based on the vision of attracting new users, retaining current users and growing overall market share. This leads to a mission to inform, educate and inspire.

The Marketing Core Business conveys information generated through primary projects to stakeholders in fields which range from market/trade intelligence, consumer/trade education, generic product promotion, trade/industry relations and market access/development. The Potato Nation consumer website www.potatonation.co.za provides comprehensive nutritional information and recipes on potatoes. It also serves as a lively platform for social media interactions.

In the year under review there was a strong focus on content generation in recipe development as well as health and nutrition with an emphasis of "walking the talk"; maximising on the Heart Mark; repositioning potatoes as tasty, versatile and convenient; strengthening the image library; debunking myths and countering negative publicity as well as reviewing existing- and generating new relevant literature. In this, technology opportunities such as TV and radio, media and public relations as well as social media were optimised.

The Core Businesses are supported by Operations, Finance and Communication. In this, PSA makes use of state-of-the-art technology to communicate pertinent information and intelligence to role players in the industry. Optimising communication technology such as WhatsApp forums, developing an intelligence App, digitising CHIPS magazine, the PSA Newsletter and this Annual Report, have already aided in working smarter. PSA is there to support the potato industry and in particular the producers. By embracing new technology, we endeavour to hone our role. PSA is honoured to be of service!

Willie Jacobs
Chief Executive Officer





During the 2020/2021 financial year, the PSA Operations function provided an enabling support role to the Core Businesses and other divisions within the organization.

Amongst others, some of the activities conducted by Operations included the following:

- The Supplier Database was developed and became functional, thereby ensuring that all PSA's vendors are compliant.
- The following policies were reviewed and implemented:
 - HR
 - Supply Chain
 - Traveling and Accommodation
- Events co-ordination in collaboration with other divisions. Of note is the first hybrid PIF and Mini PSA Congress held in the first half of 2021.
- A task team was established to implement a Covid Protocol.
- Various cost saving IT initiatives were implemented, such as:
 - IT Management
 - iPads to save costs in going paperless
 - Optimisation of telephone system
- End-to-end co-ordination of Statutory Meetings.

In the 2020/2021 financial year, the following personnel movements took place:

INTERNS APPOINTED

- Tumelo Masilela (Operations Intern) appointed 2021/03/01.
- Nkhentsani Sithole (Marketing Intern) appointed 2021/03/01.
- Dikgheto Mokoena (Information Intern) appointed 2020/09/01.

PERMANENT APPOINTMENTS

- Dikgheto Mokoena (Information Administrative Officer) permanent appointment 01/03/2021.
- Masabatha Motsoeneng (Transformation Specialist) appointed 13/07/2020.

RESIGNED FROM PSA

- Dr André Jooste (CEO) resigned 30/11/2020.
- Pieter van Zyl (Manager Industry Information) resigned 30/06/2021.
- Monica van der Merwe (Personal Assistant to CEO) resigned 30/09/2020.

TRANSFER WITHIN PSA

- Laryssa van der Merwe (Senior Administrative Secretary) to (Personal Assistant to CEO) transfer date 2021/01/08.

INTERNSHIPS COMPLETED PSA

- Jabulani Molefe (Prokon Intern) completed 2021/02/28.
- Patience Silimela (Marketing Intern) completed 2020/09/21.
- Jason van der Merwe (Information Intern) completed 2020/08/31.

TEMPORARY APPOINTMENT

- Khathu Tshikunde (Transformation Administrator) appointed 2021/03/23.

POTATO INDUSTRY DEVELOPMENT TRUST

Board of Trustees:

- Ernst Yzel (Chairperson)
- Dr Ben Pieterse
- Martin Fourie
- Shadrack Mabuza
- Deon van Zyl

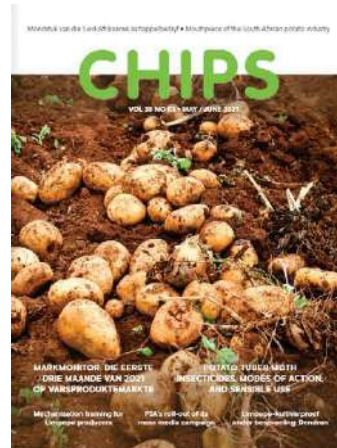
COMMUNICATION

The Communication business unit of PSA provides a support function towards strategic communication between PSA and its internal and external stakeholders. In aid of the organizational strategic goal to provide industry specific knowledge management support, support is provided to achieve the objective of knowledge transfer.

The means through which communicative support is provided are:

- Content generation and editing
- Media Liaison
- CHIPS Magazine
- PSA Annual Report
- Media Monitoring
- Newsletter
- Corporate positioning/branding
- Corporate website
- WhatsApp's

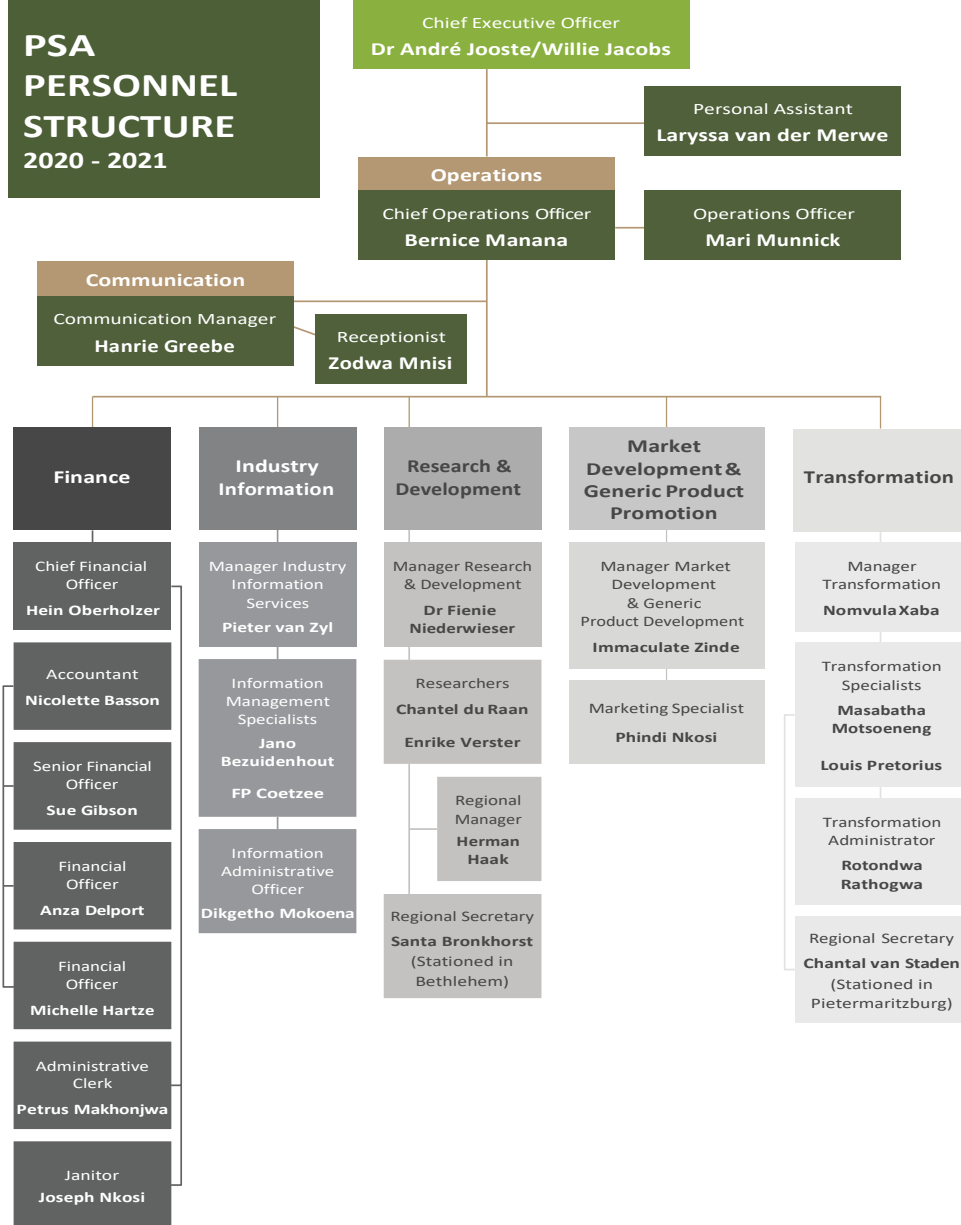
In the year under review CHIPS magazine was placed on tender for the first time in the 35 years since the inception of the publication. The tender was awarded to Plaas Media with effect from the Jan/Feb 2021 edition until the end of the current statutory period. In order to stay abreast with new technologies, the process of upgrading the extensive content of the PSA website commenced in the second half of 2020.



PSA BOARD OF DIRECTORS

	NAME	REPRESENTING
1	J F (JF) van der Merwe (CHAIRPERSON)	Independent / Non-Aligned
2	J R (Rudi) Heinlein (VICE-CHAIRPERSON)	Northern Region (Limpopo, Mpumalanga, Gauteng, Loskop Valley)
3	G F (Gert) Bester	Audit Committee member
4	A S (André) Coetzee	Western Region (Western Free State, North Cape, Northern Cape, South West Free State)
5	J I (Izak) Cronjé	Western Region (Western Free State, North Cape, Northern Cape, South West Free State)
6	E (Egan) Duminy	Southern District (Western Cape, Sandveld, Ceres, Southern Cape, South Western Cape)
7	M J (Mike) Green	Eastern Region (Eastern Free State, KwaZulu Natal, North Eastern Cape)
8	J C (Johan) Holtzhausen	Northern Region (Limpopo, Mpumalanga, Gauteng, Loskop Valley)
9	V (Vuyani) Kama	South Eastern District (North Eastern Cape, Eastern Cape)
10	N J (Nicolaas) Lourens	Eastern Region (Eastern Free State, KwaZulu-Natal, North Eastern Cape)
11	Enos Mahwai	Central District (Limpopo, Free State, Gauteng, Mpumalanga, North West)
12	N R (Rodney) Mbuyazi	Eastern District (KwaZulu-Natal)
13	P G J (Gerhard) Posthumus	Chairperson: National Seed Potato Committee
14	DC Schellingerhout	Southern Region (Sandveld, Eastern Cape, Ceres, Southern Cape, South Western Cape)
15	W A (Wouter) van Amstel	Northern Region (Limpopo, Mpumalanga, Gauteng, Loskop Valley)
16	J P J (Jan) van Zyl	Southern Region (Sandveld, Eastern Cape, Ceres, Southern Cape, Southwestern Cape)

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



FINANCE & ADMINISTRATION

PSA is a Non-profit company (NPC), 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.

FINANCIAL MATTERS

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

On 30 June 2021 PSA (NPC) the second year of the fifth statutory period concluded. Every year an amount in the form of bridging capital is transferred to the next year. This is simply done to continuously maintain a positive cash flow as the PIDT continuously have a high debtors' book. This is the result of the inevitable time lag for bag manufacturers to recover the levy from their debtors (producers).

To address this issue, for the potato industry as well as other industries, the National Agricultural Marketing Council (NAMC) decided on 29 May 2018, during its Council meeting, to adopt a guideline that when making recommendations to the Minister of Agriculture, Forestry and Fisheries regarding carry-over funds, depending on the merit of each case, a maximum of two months of levy income in a relevant industry, be used to cover running expenditure of organisations that operate as a going concern over a levy cycle. The remainder, if any, can still be used for transformation projects. The past financial year has been characterised by a negative growth in volumes and therefore levy revenue resulted in an amount under budget, but with savings and underspending on expenditures. This underspending can still be attributed to savings on operational costs partly due to the COVID-19 Pandemic and the associated restraint measures that resulted, but to a lesser extent than the previous year, in certain projects not being able to be executed. Due to the lower income, there was a slight decrease in the carried over funds which amounted to R19.1 million. Except for the bridging capital, the carried over funds (ringfenced funds) will form part of a decision to carry over funds of the said projects to the new financial year to complete the relevant projects. PSA (Voluntary) also has non-statutory funds available that are supplemented by sponsorships and combined project funding.

These funds are used to fund projects and functions in the interest of potato producers in particular, and the potato industry in general. Approval for the appropriation of such funds lies with the National Council of PSA (Voluntary).



STATUTORY INCOME & EXPENDITURE - PSA (NPC)

PSA (NPC) as an administrator, collected R48.5 million on behalf of the PIDT in statutory levies during the 2020/2021 financial year. This amounts to 100% of all levies recovered that were invoiced by Bag Manufacturers, Processors and Seed Growers. A further R448 852 was received in interest on investments. The 2020/2021 budget of PSA (NPC) as approved by the PIDT amounted to R57.45 million of which R51,97 million was appropriated. The underspending of R6.2 million (10.9%) was attributable especially to savings on Travel and Accommodation-, meeting- and overseas travel, as well as savings on other operational costs. There was still an underspending on certain projects due to the Covid-19 Lockdown situation which prevented certain projects from being carried out at institutions, as well as public meetings/symposia that could not take place. Capital in the PIDT transfer capital

account started off with R15.41 million at the beginning of the statutory period on 1 July 2019, which was carried over as per Ministerial approval, and accumulated to R20.24 million on 30 June 2020 and decreased to R19,1 million, and will be transferred to the 2021/2022 financial year, with the necessary approval. The funds that could not be spent due to the Covid-19 regulations were ringfenced and transferred to the 2021/2022 financial year with the approval of the Potato Industry Development Trust (PIDT).

As set out in Figure 1, PSA (NPC) managed to meet the prescripts given by the Minister. According to a PSA Congress decision, equal funds had to be allocated to the three core businesses namely Research and Development, Transformation and, Market Development and Generic Product Promotion.

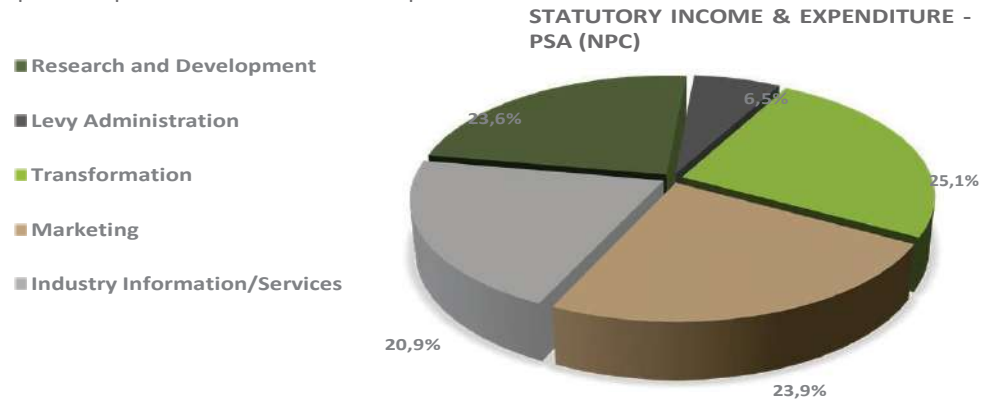


Figure 1: PIDT Appropriation of funds

The marginal deviations in respect of the above were due to work still in progress in the Research core business. This gave rise to funds being transferred to the 2021/2022 financial year, but still utilised in the relevant core businesses. The decision was taken that a ratio of about 60%:40% between operational and project costs should be maintained. In this regard PSA (NPC) succeeded. The expenses of approximately R51,2 million was utilised as shown in Figure 1 (rounded off).

PSA VOLUNTARY

PSA (Voluntary) funds are mainly supplemented by the following:

- Return on Investment and loans R570 312
- Rent received on capital items R649 834

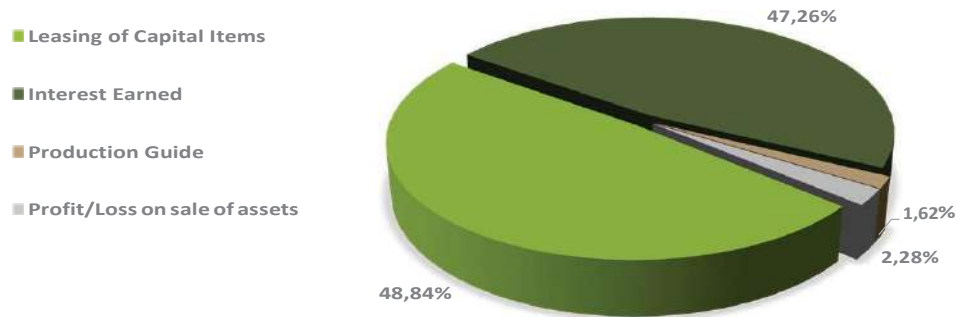


Figure 2: Income PSA (Voluntary)

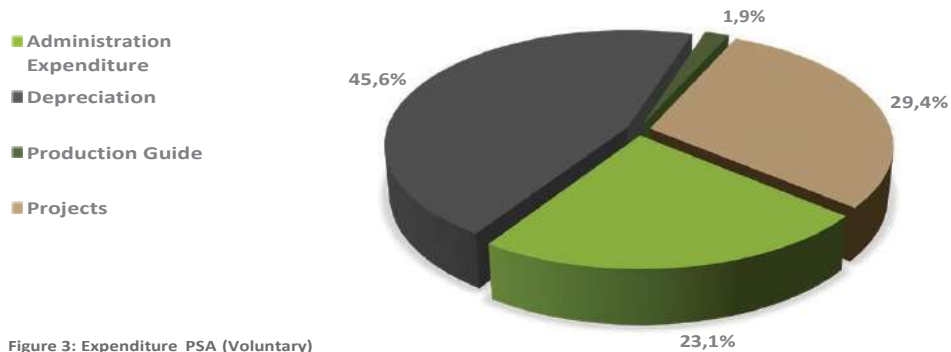


Figure 3: Expenditure PSA (Voluntary)

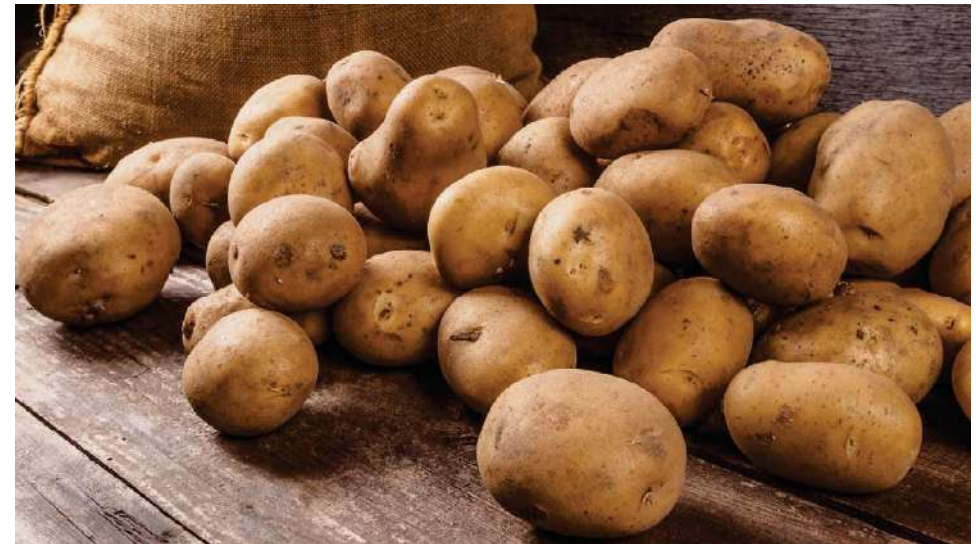
PSA VOLUNTARY ...Continued

Expenses related to the normal income as mentioned below are depreciation of assets R441 136, audit costs R34 200, administrative costs R216 172, corporate and other project costs R285 653 (refer to Figure 3). The Symposiums and Regional Meetings were funded in total by additional income received from sponsors during the year under review.

Total funds and reserves amounted to R14 210 745. Property and movable assets, based on book value amounted to R1 295 796 and investments and loans to R12 186 287.

FINANCIAL POSITION

The allocation to projects could be adjusted upwards to optimize the value added to the industry. Tally and control measures are continuously reviewed and tightened to restrain operational costs and thereby ensuring a healthy balance between operational costs and the appropriation in respect of projects. The Audit for the 2020/2021 resulted in a clean report.. As part of its managerial responsibilities, PSA (NPC) is also responsible for the implementation and management of the core business projects accepted by PSA’s Board of Directors and approved by the PIDT.





INDUSTRY INFORMATION

PRIMARY OBJECTIVE: To make information available to producers and empower them to make strategic and tactical decisions in order to optimise the sustainability of their potato divisions.

INFORMATION DISTRIBUTION PROJECTS

1. Market information & intelligence
2. Crop estimates
3. Consumer price intelligence
4. Monthly down-grading on markets
5. Build & sustain database

PRODUCTION RELATED PROJECTS

1. Crop growth performance indicators
2. Effective management of energy and water
3. Pack-house project

SECONDARY GOAL:

The information generated is also used for various other purposes, for example, to influence policy/regulations.

MODELLING RELATED PROJECTS

1. Industry Model
2. Farm level modelling and production cost

MARKET INFORMATION & INTELLIGENCE (INFORMATION DISTRIBUTION PROJECT)

OBJECTIVE

To gather price and volume information from markets and to disseminate not only raw sales, but also intelligence.

PLANNED ACTIVITIES

- **Receive:** Daily Market statistics from service providers.
- **Disseminate:** Daily and weekly market reports.
- **Update database:** excel files and webpage.

IMPACT

- Role players can make market-related decisions when planning production and marketing activities.

- Role players have daily access to information on the supply of and the demand for potatoes as well as prices and quality.

OUTCOMES

- Morning, afternoon and weekly reports (email).
- Daily SMS in the afternoon.
- Monthly market comment.
- Articles and presentations: historic and current trends in the marketplace and production.
- Updated database: numerous years of information.

CROP ESTIMATES (INFORMATION DISTRIBUTION PROJECT)

OBJECTIVE

To provide the industry with estimates of the total potato crop.

PLANNED ACTIVITIES

- **Traditional method:** Regional officers make use of phone calls and farm visits to compile harvest reports for the 16 production regions (determine hectares planted and size of harvest per region). Summaries of reports are submitted to Regional Management Committees for approval and distributed to producers.
- **Satellite technology:** Determine the hectares planted. PSA supplies reference points to the service provider beforehand. Field actuation

is conducted by PSA to verify the accuracy of the service provider afterwards. (Only an estimation of hectares planted, no yield).

IMPACT

- Role players can make market-related decisions when planning production and marketing activities.

OUTCOMES

- Harvest reports per region (updated database).
- Articles and presentations: historic and current trends in plantings and size of the harvest.
- Satellites: In the process, lessons learned, streamline the process.
- Monthly crop report.



CONSUMER PRICE INTELLIGENCE (INFORMATION DISTRIBUTION PROJECT)

OBJECTIVE

To build and maintain a database on consumer prices (formal and informal).

PLANNED ACTIVITIES

- **Receive price information** (monthly) from service providers.
- **Build and maintain database:** informal and formal consumer prices.

IMPACT

- Create awareness on request.
- Use total consumer spending in negotiations with government and NGO's.

OUTCOMES

- Identification of price trends.
- Use in the calculation of total consumer spending.

MONTHLY DOWNGRADING AT MARKETS (INFORMATION DISTRIBUTION PROJECT)

OBJECTIVE

To build a database on monthly downgrading at markets:

- Volumes delivered by respective production regions to the different markets.
- Volumes delivered per class - per region (Class 1, class 2, class 3 and lowest class).
- Volumes downgraded and reason.

PLANNED ACTIVITIES

- **Receive information:** monthly.
- Add to database.

IMPACT

- Intelligence on quality assessment.

OUTCOMES

- Monthly PSA newsletter.

BUILD AND SUSTAIN DATABASE (INFORMATION DISTRIBUTION PROJECT)

OBJECTIVE

To develop a user-friendly database to retrieve information and statistical data for PSA and other role players: one-stop service information tool.

PLANNED ACTIVITIES

- Further development of the platform to streamline current activities of disseminating reports. Sending reports via cell phone when not in the office.

- PSA will be able to directly collect data from markets.
- Correction of area codes.
- Website to be more user friendly.
- **IMPACT**
- Updated in-time information is available to any stakeholder.
- More intelligence is available for individual role players.

CROP GROWTH PERFORMANCE INDICATORS (PRODUCTION RELATED PROJECT)

OBJECTIVE

To generate intelligence on the production and production conditions in the regions by analysing different crop indices over time.

PLANNED ACTIVITIES

- Historic pivots in regions captured on new service provider's platform.
- Obtain coordinates of pivots/fields in regions for new season. Send to service provider.
- Build and sustain databases of 5 indices. Generate index graphs.
- Compare and analyse the NDVI index graphs: planting months, seasons, regions, cultivars, and participating fields. Generate intelligence regarding the growth of the crop in the region.
- Evaluate other vegetative indices as well: case studies.

IMPACT

- Introduction of satellite technology to the potato producer. Satellite imagery

comes in handy for producers who apply precision farming techniques. Can use vegetative indices to benchmark crop.

- Using and analysing indices over time, objective and real-time industry information can be generated. Producers can make better informed decisions when planning production and marketing activities.

OUTCOMES

- By analysing vegetative indices, more information is being accumulated regarding production and production conditions in a region. Objective and real-time information.
- Articles and presentations: Value and usability of vegetative indices used in comparing i.e. seasons, planting months, participating fields, cultivars and regions.
- Lessons learnt and issues identified.

EFFECTIVE MANAGEMENT OF ENERGY AND WATER (PRODUCTION RELATED PROJECT)

OBJECTIVE

To evaluate 4 different irrigation systems in Limpopo in terms of water and energy use efficiency.

PLANNED ACTIVITIES

Objective evaluation and comparison of 4 irrigation systems in Limpopo. 12 pivots. Install equipment. Retrieve data in 3-week cycles from dataloggers. Evaluate systems.

POTENTIAL IMPACT

80% of potatoes in SA are under irrigation.

Three new irrigation systems will be evaluated against the well-known pivot irrigation system. Determine if this new irrigation system is more efficient in terms of different performance indicators (water use efficiency, energy use efficiency, the initial outlay of systems, annual maintenance costs and management requirements).

OUTCOMES

Report on different irrigation systems: case studies done.

PACK-HOUSE PROJECT (PRODUCTION RELATED PROJECT)

OBJECTIVE

To improve the overall efficiency of pack-house and marketing activities on potato farms.

PLANNED ACTIVITIES

- Recruit co-workers. Weigh bags in pack-houses and remove from premises (2020). Use checklist:
 - Weight of bag (2020),
 - Mechanical damage,
 - Uniformity of tubers,
 - Size-grouping.
- Weigh after 7 days. Feedback to the farmer. Government regulation.
- Weekly WhatsApp: comparing market prices per cultivar and per size – same region.
- Regular market visits.

IMPACT

- Norms (for benchmarking purposes) for pack-house and marketing efficiency are being established and published.
- Producers can take corrective actions while visiting pack-houses.

OUTCOMES

- Analysis of pack-house efficiencies: labour, packaging and market prices per production region.
- Analysis of weight loss in production regions. Compare with government regulation in terms of weight of bags - report per production region.
- WhatsApp: feedback and market prices.
- Chips articles and presentations: results on the project.
- Market visits and feedback to producers.

POTATO INDUSTRY MODEL (MODELLING RELATED PROJECT)

OBJECTIVE

To gain a better understanding of the potato industry by using scenario analysis.

PLANNED ACTIVITIES

Updating of model (quarterly). Discussions with BFAP. Evaluate baseline, test what-if scenarios on industry and regions, evaluate different regions.

IMPACT

- The baseline and scenarios provide an indication of current and future directions into which the industry may head. In addition, which external factors could have an influence on the industry? Use in submissions to

government, NGOs and other role players.

- The BFAP model is nothing more than a planning tool that stimulates strategic thinking and provides support in decision making.

OUTCOMES

- Presentations and articles where certain issues (scenarios) will be highlighted, as discussed during regular meetings.
- Getting a better understanding of the underlying fundamental drivers/factors that could affect the potato industry (and/or different regions) over the next few years.

FARM LEVEL MODELLING AND PRODUCTION COST (MODELLING RELATED PROJECT)

OBJECTIVE

To integrate production cost models with farm level and industry models that enable the simultaneous analysis of alternative future scenarios at both farm and industry level.

PLANNED ACTIVITIES

- Update production cost models for respective production regions.
- Test with producers in regions.
- Integrate production cost models with FinSim model: test farm level scenarios.

IMPACT

- Production costs and scenario analysis done: Provide an indication of the current and future sustainability of potato farming.
- Use in presentations / submissions to government and NGOs.

OUTCOMES

- Updated regions' production costs.
- Presentations indicating cost trends.
- Articles: scenario analysis on farm level.

INFORMATION COMMITTEE 2020/2021

	NAME	REPRESENTING
1	Jan van Zyl	Chairperson
2	Wouter van Amstel	Limpopo, Mpumalanga, Gauteng, Loskop Valley
3	Wessel du Randt	KwaZulu-Natal, Eastern Free State, North Eastern Cape
4	Charl Nel	North Western Cape, Northern Cape, South Western Free State, Western Free State
5	Louw Smit	Sandveld, Eastern Cape, Ceres, Southern Cape, South Western Cape
6	MC Venter (co-opted)	Limpopo
7	Johan Holtzhausen (co-opted)	Mpumalanga
8	Rolands Buys (co-opted)	KwaZulu-Natal
9	Dr André Jooste / Willie Jacobs	CEO (PSA)
10	Pieter van Zyl	Manager: Industry Information (PSA)
11	Janó Bezuidenhout	Information Specialist (PSA)
12	FP Coetzee	Information Specialist (PSA)
13	Laryssa vd Merwe / CorpStat	Company Secretary (PSA)





RESEARCH AND DEVELOPMENT

High marketable yield is seen as one of the most effective ways to manage the continuous input cost-squeeze. The yield of a planting is determined at three levels: Firstly, the potential yield is affected by the genetic make-up of the cultivar planted, the CO₂ concentration in the air, the temperature and the energy available in sunlight (radiation). However, water, nutrient availability and seed quality are normally not perfect, thus thereby determining the attainable yield. At the third level the attainable yield is further reduced by the effect of pathogens, insects, nematode pests and weeds.

Our research is aimed at all three these levels: Research to identify improved cultivars aims to increase yield potential, research on water and nutrient use aims to reduce the limiting factors whereas research on pests and diseases aim to address the reducing effect on yield.

Research also has a responsibility to anticipate challenges of the future and to act proactively to prepare and protect farmers. In this regard, research pay special attention to:

- Increasing production costs,
- The anticipated effect of a changing climate on plant productivity, pathogens and pests,
- Knowledge of damaging exotic pests and pathogens and initiatives to prevent them from entering the country and
- Consumer preferences and demand for safe, nutritional food.

To assist potato farmers to stay ahead of the game, the research programme addresses factors affecting marketable yield at each of the levels mentioned. Research therefore focuses on the following:

- Identification of cultivars suitable for local conditions,
- Water use,
- Soil health,
- Potato diseases: soil- & tuber-borne, foliar and nematode diseases,
- Virus and aphid control,
- Insect pests,
- Plant nutrition,
- Quality and
- Transfer of knowledge and new research results to farmers and other role players.

Research is carried out by scientists at universities, the ARC and Provincial Departments of Agriculture and personnel of Potatoes South Africa (PSA). 2020/2021 financial year was allocated as follows:

- Research projects by external specialists: R4.6 million
- Cultivar evaluation trials by work groups: R200 000
- Fact sheets: R90 000
- Farmers courses: R100 000

HIGHLIGHTS

Research is a process of analytical investigation and sometimes leads to spectacular results in a short period of time. In most cases, however, knowledge and expertise are attained stepwise, and expertise is built incrementally. The four highlights given below illustrate the importance and value of continuous funding to build knowledge and expertise, and the ability of research to result in valuable knowledge in a short period of time.

INCREASING THE POTENTIAL YIELD: IDENTIFICATION OF IMPROVED CULTIVARS

Improved cultivars must be adapted to a wide range of different conditions and production practices because potatoes are planted and harvested every weekday in different production regions of South Africa. This poses a challenge to the selection of improved cultivars as production regions differ in respect of the time of planting and harvesting, temperature during the season, irradiation (sunlight), physiological maturity of seed at the time of planting and production practices. To identify widely adapted cultivars, cultivar evaluation trials are performed in most regions. Because these trials are standardised, objective and scientific, farmers can have peace of mind that new cultivars have been tested under diverse conditions. During the past year, 12 cultivar evaluation trials were carried out throughout the country. Cultivars were included in these trials and after the data is analysed, a report of each trial is published in CHIPS.

CONSERVING ATTAINABLE YIELD: WATER- AND NUTRIENT USE EFFICIENCY

Research at UP on water needs and irrigation, plant nutrition and growth modelling has been funded by the potato industry for many years. By using new technology as it became available, the knowledge of the water needs of potatoes in South Africa, and sophistication of irrigation scheduling are of a very high standard and is recognised by international role players. This knowledge and expertise have been applied during the last 4 years to determine the efficiency of water and nutrient use in two production regions where irrigation is applied to potatoes grown in sandy soil. The results show that in case a farmer is able to irrigate the potato crop in line with the daily Evapotranspiration (ET) of the crop, drainage can be kept to a minimum, even on sandy soils with little water holding capacities. On half the studied fields almost no drainage was recorded, indicating that many farmers manage their irrigation rates well in accordance to the crop's needs. Evapotranspiration (ET), which is often generated by weather stations) is a good indicator

of the actual ET of a well-watered potato crop. Farmers can therefore use ET values as a tool to schedule their irrigation rates, possibly in combination with soil moisture probes. Rainfall is a major cause of drainage and farmers have little control over this. Furthermore, rainfall can often not be reliably predicted under South African conditions. As the water holding capacity in the root zone of a sandy soil is so limited, it is difficult for a farmer to adjust irrigation amounts based on rain forecasts. In case the rain does not realise but the farmer already reduced irrigation, the crop may quickly run into water stress. Fields that have a water table are much less susceptible to drainage than freely draining unstructured soils, but face a higher risk of water logging during periods of high rainfall, especially when the limiting layer is shallow (<0.8 m) in the profile.

There are two strategies possible to maximise water use efficiency (WUE). Farmers can achieve reasonable yields with low irrigation amounts by either growing a crop in winter when ET rates are low and rainfall occurs, or by carefully irrigating the crop at or just below the potential ET rates. Under high yielding conditions, a farmer may copiously irrigate a crop and yet achieve a high WUE, provided that the very high yield potential in this season is reflected by the actual yield.

LIMIT YIELD REDUCTION: EFFECTIVE PLANT PROTECTION PRODUCTS

PSA does not develop or market plant protection products. These remedies are however of critical importance in the management of pests and diseases such as leaf blights and potato tuber moth. Internationally scientists and agrochemical companies are concerned about resistance of insect pests and pathogens to plant protection products because the agricultural industry cannot afford to lose any of the remedies. Three years ago, PSA initiated research at the ARC to help identify risks of resistance of fungicides by *Alternaria* species causing early blight and brown spot, as well as *Tuta absoluta* to insecticides (NWU). The objective of this research is to establish baseline data of sensitivity levels which will enable us to identify current risks of a loss of sensitivity and to be able to compare the levels should tolerance to specific products be expected in the future.

Evaluation of 6 populations of *Tuta absoluta* for sensitivity to 6 actives of registered insecticides showed that *Tuta absoluta* sensitive to insecticides entered South Africa and that they are still sensitive. Resistance can thus be ruled out as reason for poor control.

Evaluation of more than 100 isolates of 4 *Alternaria* species from 8 production regions indicated a possible shift in sensibility to some of the 5 fungicide groups tested. Although this was the first study and are followed up with genetic and other studies, the results are in accordance to international Fungicide Resistance Action Committee risk classification, and point to the importance of using fungicides of different mode of action groups in a spraying programme.

RESEARCH PROJECTS

WATER USE AND QUALITY

DESCRIPTION

Irrigation water is of cardinal importance to the potato industry. Although potato is one of the most efficient crops to convert water to food and income, it is not drought tolerant. To maximise yield and quality, water must be available to the plant throughout the growing season. Therefore, research on water use and quality enjoys a very high priority in PSA's research strategy. We monitored the ground water level and quality for the past 17 years in one of the biggest production regions, the Sandveld; thus assisting farmers to implement irrigation scheduling and support research to determine the water and nutrient use efficiency in regions with sandy soil.

IMPACT

Ground-breaking research measured water use efficiency and the leaching of water and nutrients into soil below the root zone on farms in the North West and Sandveld. Results showed that water use efficiency is generally good and that there is a potential for leaching of water and nutrients during winter (the rainy season) in the Sandveld. The results additionally serve as guideline to individual farmers to improve use of irrigation water. Soil water monitoring in the Sandveld showed that water levels and quality in some boreholes improved after the previous season with average rainfall, while both water level and quality deteriorated in some boreholes. This information contributes to underground water management in the Sandveld

CULTIVAR EVALUATION AND MAINTENANCE OF IN VITRO NUCLEAR PLANTS

DESCRIPTION

Of all the factors affecting yield, quality and damage by pests and diseases, the biggest contribution is made by the genetic characteristics of potatoes. For this reason, research to continuously identify cultivars with adaptability and high yield, and resistance to diseases (currently soft rot and fusarium), enjoys high priority.

Funding also ensures that industry has access to open cultivars and that modern gene technology is available to identify tissue culture nuclear plant to avoid mixing of cultivars.

IMPACT

Through co-operation between PSA, farmers and 6 seed houses in South Africa, new cultivars are continuously evaluated on farms in 10 production regions. The results are valuable for the seed houses as cultivars not suitable to the climate and production practices in South Africa can be eliminated from their system at a relatively early stage. Farmers on the other hand can have peace of mind that new cultivars are extensively tested before they are planted. Despite availability of many new, modern cultivars, some of the old, open cultivars for example BP1, Up-to-Date and Hertha remain in demand. By supporting in vitro maintenance, disease-free and true to type nuclear material remains available to industry.



NEMATODE MANAGEMENT

DESCRIPTION

Plant parasitic nematodes have been described as the assassins of the health of potatoes. In the past, they were controlled by application of chemicals. These nematicides are increasingly withdrawn from the market due to its detrimental effect on the ecology. Although there are currently numerous nematicides available, research must pro-actively identify and develop alternative strategies to manage plant parasitic nematodes in South Africa. The focus of this work is currently to determine how crops used in rotation with potatoes affect nematode populations, and to screen numerous cover crops for tolerance to species of the two most destructive plant parasitic nematodes, viz root-knot- and lesion nematodes. Study on the nematodes in the soil of an Eastern Free State farm over a number of years indicates that the population of nematodes are higher after a season of growing sunflower and that tillage can reduce the nematode populations compared to soil that is not tilled. Observation over the next few years will confirm these preliminary results, but they may indicate that planting of sunflowers in fields where nematode is a recurrent problem, should be avoided. Evaluation of cover crops indicates that some are candidates for use in rotation with potato.

IMPACT

By identifying crops resistant to the most troublesome nematodes, these crops can be planted as cover crops to reduce the nematode population in soil before plant. This measure will contribute to control of nematodes during the potato production cycle.

INSECT PEST MANAGEMENT

DESCRIPTION

Potato Leaf Miner (PLM) is the most damaging insect pest in South Africa. Focus is currently on the source of infestations and to find ways to reduce these sources before populations become too big to control.

Tuta absoluta (*Tuta*) is a relative of the potato tuber moth. When it entered the country in 2016 the pest status of *Tuta* on potatoes was uncertain. This insect is also known to develop resistance to insecticides in a shorter period than potato tuber moth. The aim of research is to ascertain whether *Tuta* causes damage to potatoes and whether the population that entered the country was already resistant to insecticides.

IMPACT

Studies in the summer and winter rainfall regions indicate that the source of new infestations of PLM is pupae of the PLM left on the soil surface after potatoes have been harvested during the previous season. Two nematodes which feed on the pupae of PLM have been identified. Field research needs to be carried out, but this indicates an exciting possibility to reduce the source of new infestations and therefore improve the farmers' ability to manage the pest. Research showing that *Tuta absoluta* is sensitive to insecticides registered for use on the insect, indicates that resistance can be ruled out as cause of poor control.

Our observations showed that *Tuta* does mine in potato leaves like potato tuber moth (PTM). However, insecticides used to control PTM, also control *Tuta* in the field. *Tuta* does not attack dormant tubers in the field like PTM does. However, once tubers start to sprout, *Tuta* is able to enter tubers through the sprout tissue in the same manner as PTM.



SOIL- AND TUBER-BORNE DISEASES

DESCRIPTION

Soil- and tuber-borne diseases are by implication very difficult to control. In the past, fumigants and hard chemicals were available and affordable enough to control the diseases. Farmers also had access to virgin soil. The situation has changed in recent years and soil-borne diseases are regarded as one of the biggest threats to potato production in South Africa in the medium to long term.

Aspects of management of the following pathogens are being studied currently: *Verticillium* causing wilt; *Ralstonia solanacearum* causing bacterial wilt, *Spongospora* causing powdery scab and root galling, soft rotting bacteria, and the disease complex causing premature dying in Limpopo during spring.

IMPACT

By using conventional and modern molecular techniques it was confirmed that *Verticillium dahliae* only occurs in the Sandveld. Most crops currently planted in rotation with potatoes are alternative hosts of *V. dahliae* or can harbour *Verticillium* in dead tissue. The results highlighted the need to evaluate other crops, including cover crops and green manure crops for use as rotation crops.

More information regarding the management of powdery scab became available through research. The susceptibility of commercial cultivars to powdery scab and root galling has been determined. Most cultivars have moderate tolerance to both diseases. Planting of susceptible cultivars are recommended only if the risk for powdery scab is low. The host status of crops used in rotation with potatoes has been identified.

Soybean has been identified as having potential of a trapping crop to reduce the infestation levels of soil. Field trials are needed to determine the practical application of this finding.



FOLIAR DISEASE MANAGEMENT

DESCRIPTION

Although late blight is the most destructive foliar potato disease worldwide, leaf blight (early blight and brown spot) caused by *Alternaria* species, is the most troublesome in South Africa. Application of fungicides and planting of tolerant cultivars are two of the most effective elements of an integrated management strategy. Research in other countries found that several *Alternaria* species can cause leaf blight and that *Alternaria* is able to develop resistance against fungicides. The objectives of the current project are: 1. To determine whether *Alternaria* species other than *A. solani* and *A. alternata* cause leaf blight, and 2. To classify commercial cultivars regarding their tolerance to *Alternaria* species, and 3. To determine whether the species involved already developed resistance against fungicides.

IMPACT

A study on more than 300 isolates from leaf blight collected in 6 production regions, showed that at least two *Alternaria* species other than *A. solani* and *A. alternata* cause leaf blight in South Africa. This partly explains why it is often difficult to identify symptoms on leaves. Work to describe the symptoms caused by the 4 different *Alternaria* species so that they can be distinguished, is in progress.

The effectivity of five different fungicides on isolates of *A. solani* and *A. alternata* from the different regions have been tested.

VIRUS AND APHID MANAGEMENT

DESCRIPTION

Various species of aphids are the vectors that transmit virus from one potato plant to another. These vectors are sometimes present in a field and the environment around a field, or they can migrate from far away fields to infect a field of seed potatoes. This project has put in place 9 suction traps in seed production regions to monitor the number of vectors carried by wind currents to seed potato fields.

IMPACT

Weekly reports enable seed growers to control aphids timeously. The next step in the project is to use long term data to determine how aphid fights are affected by climate.

KNOWLEDGETRANSFER

DESCRIPTION

Research is carried out by specialists and when they report their results, they often use technical jargon and a language that many farmers and agriculturists neither understand nor appreciate. The objective of this project is to make knowledge generated through local and other scientists’ research, available in various forms so that it can be adapted by industry to make a difference. Outputs of these efforts include final project reports, factsheets, symposia & workshops, ad hoc desktop studies and popular articles.

IMPACT

Final reports of projects funded by the potato industry are available to other researchers and agriculturists. Fact sheets are popular scientific publications, the latest ones being on eelworm, late blight and groundwater management.



RESEARCH COMMITTEE 2020/2021

	NAME	REPRESENTING
1	André Coetzee (Chairperson)	Northern Cape, South Western Free State, North West
2	Gert Bester (Vice Chairperson)	Eastern Free State
3	Gerhard Posthumus	Seed Potato Growers, Western Free State
4	Johan Holtzhausen	Loskopvallei, Mpumalanga, Gauteng
5	Gavin Hill	Seed Potato Growers, KwaZulu-Natal, North Eastern Cape
6	Ross Bergh	Sandveld
7	Inus Oosthuizen	Ceres, Southern Cape, South Western Cape, Eastern Cape
8	Rudi van Deventer	Limpopo
9	Ineke Vorster (co-opted)	Processing Industry (French Fries)
10	Frank Osler (co-opted)	Processing Industry (Crisps)
11	Marieta Botha (co-opted)	Plantovita
12	Sanette Thiar (co-opted)	Potato Certification Service
13	Dr Freek du Plooy / Dr Ben Pieterse	PIDT
14	Dr André Jooste / Willie Jacobs	Chief Executive Officer (PSA)
15	Dr Fienie Niederwieser	Manager: Research and Development (PSA)
16	Chantel du Raan	Researcher (PSA)
17	Enrike Verster	Researcher (PSA)
18	Laryssa vd Merwe / CorpStat	Company Secretary (PSA)

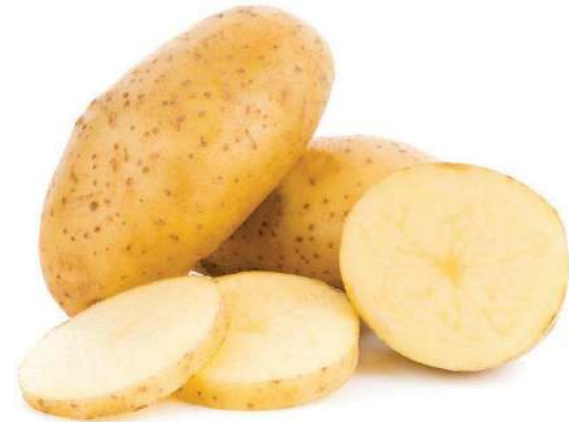


TRANSFORMATION

The role of Transformation within commodities is viewed as being of utmost importance. PSA has, for years, been involved in transformation projects and results are becoming visible. The number of hectares of potatoes planted by Black farmers is on the increase and there are farmers who are already identified as having the potential to farm commercially. These farmers currently receive support from PSA. The Transformation Core Business carried on forging partnerships with other stakeholders to advance its goals of successfully settling New Era farmers.

Collaboration with processors will, for example, ensure that farmers who do not have packhouse facilities are able to get a market for their potatoes. This year also saw the core business embarking on compiling training DVD's which will be distributed to all the farmers.

THE PROGRAMMES IN THE TRANSFORMATION CORE BUSINESS CONSIST OF THE FOLLOWING:





ENTERPRISE DEVELOPMENT

1

GOAL: To develop Black farmers to grow and produce potatoes commercially in a sustainable way.

PSA ENTERPRISE DEVELOPMENT STRATEGY

- Choose participants based on feasibility studies and viable business plans
- Expand hectares of deserving producers
- Regional meetings to disseminate information



PROVISION OF SEED: PSA (NPC) CONTRIBUTION

Y1 = 100%	Y2 = 75%	Y3 = 50%	Y4 = 25%
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FUNDS FOR THE ENTERPRISE DEVELOPMENT PROGRAMME

2010/2011	R883 969	7 Farmers
2014/2015	R4,45 million	16 Farmers
2016/2017	R5,5 million	30 Farmers
2018/2019	R6,01 million	21 Farmers
2019/2020	R4,3 million	14 Farmers
2020/2021	R6 305 000	15 Farmers



RURAL DEVELOPMENT

- Service level agreement between PSA and Rural Development-National signed.
- PSA partnering with the Limpopo Department of Rural Development.

KAGISO / AFGRI / PSA

- Memorandum of Agreement signed between PSA, Kagiso Trust and Afgri.
- To fast-track commercialisation of the new era farmers.
- Partners assess projects presented for funding.
- Can source funds from other financiers.

PARTNERSHIPS TO ASSIST PARTICIPANTS

- Collaboration with Western Cape Department of Agriculture.
- PSA is member of the Vegetable Commodity Projects Allocation Committee (CPAC).
- One project supported to plant 12 ha of potatoes for Simba.
- PSA provided seed and mentorship support to this project.
- Collaborations with VKB in Limpopo.
- VKB provides a credit facility so some ED farmers and also mentorship support and bookkeeping.

PSA ACTIONS

PSA provides support in the form of seed purchase, mentorship, prefeasibility studies and business plans for New Era farmers. Seed is provided on a four (4) year 25% sliding scale. This is to ensure that at the end of the four-year support period, farmers can stand on their own and run a sustainable venture.





SMALL GROWER DEVELOPMENT PROJECTS 2

Focus on food security, rural development and job creation.
Over **800 PARTICIPANTS** during past financial year

INFORMATION DAYS WITH ATTENDEES:

- Bizana (45)
- Mthatha (58)
- Tugela Ferry (60)

SMALL GROWER DEVELOPMENT PROGRAMME FUNDS FOR 2020/2021:

R 227 811

Enables communities to be food secured.
SUPPORT RANGES FROM 0.2 HA TO 1 HA

24 PROJECTS	DEMONSTRATION TRIALS	ATTENDANCE	YIELDS
<ul style="list-style-type: none"> • KZN • Eastern Cape • Mpumalanga • Limpopo 	<ul style="list-style-type: none"> • Different cultivars to assess yield and suitability • Sprayed and unsprayed • Dryland vs Irrigation 	<ul style="list-style-type: none"> • 55 community members per project • Reaching over 800 community members 	<ul style="list-style-type: none"> • 45 tons dryland • 65 tons irrigation



FARM-BASED TRAINING 3

GOAL: To uplift the skills of Black producers with technical and business skills.

SKILLS DEVELOPMENT FUNDS FOR 2020/2021:

R435 956

THE FOLLOWING TRAINING WAS PROVIDED:

- Mechanisation Training provided by McCain
- Seed Production Training provided by Wesgro
- One-on-one financial management support to all ED Farmers
- Powdery Scab training provided by the research division



TERTIARY SKILLS DEVELOPMENT PIPELINE 4

TERTIARY SKILLS DEVELOPMENT PIPELINE FUNDS FOR 2020/2021:

R688 065

- 2** Internships and workplace experience
- 15** Postgraduate students
- 10** Undergraduate students

TRANSFORMATION PROJECTS



ENTERPRISE DEVELOPMENT

DESCRIPTION

The aim of the Enterprise Development (ED) programme is to assist in setting up, supporting, and growing viable new Black-owned potato producing enterprises. This is done through the provision of seed, mentorship, training, technical support and industry exposure.

IMPACT

- Through the support provided under the Enterprise Development Programme, the number of Black farmers planting potatoes is increasing.
- This project has created a few commercial farmers. Several participating farmers plant an average of 10 hectares, with a significant potential for growth.
- Through the provision of mentorship and training, there is an improvement in the quality of potatoes produced, proven by increased tonnage.



SMALL GROWER DEVELOPMENT PROJECTS

DESCRIPTION

The Small Grower Development Programme involves farmers who plant potatoes mainly for food security with the remaining crop sold to the immediate community. This programme involves disseminating production and business information through demonstration trials. It provides farmers with practical training on good potato production practices.

IMPACT

- This project managed to reach over 5000 different community members and thus playing a big role in addressing issues of food security in South Africa.
- It also promoted the use of best practices when planting potatoes.



FARM-BASED TRAINING

DESCRIPTION

This project aims to uplift the skills of farmworkers and to develop potato farmers' technical and business skills. It enables them to farm profitably and to improve the quality of potato production by increasing the knowledge base of potato producers.

IMPACT

Farm-based training ensured a skilled workforce who assist in improving the efficiency of the farming operations.



TERTIARY SKILLS DEVELOPMENT PIPELINE

DESCRIPTION

This project aims to develop the technical capacity for the farming enterprise by offering bursaries to qualifying students. It enables students to acquire technical tertiary education so that they can add value to the farming enterprises. It also ensures that students' skills are enhanced through internships and workplace programmes.

IMPACT

Through the induction programme provided, a high interest in the potato industry has been created amongst funded students. Students can make informed decisions about their career choices based on exposure and experience.



COMMUNICATION

DESCRIPTION

Communication within the Transformation Core Business involves liaison with industry stakeholders, communicating Transformation success stories and also to include farmers into the potato industry.

IMPACT

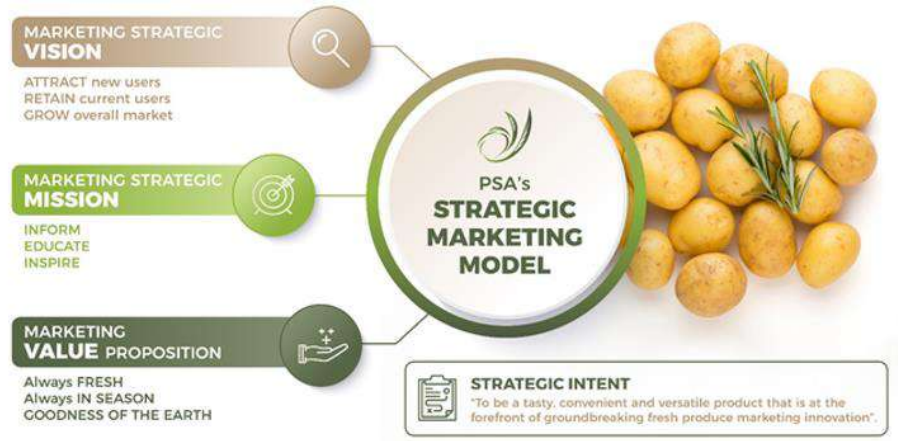
- Partnerships with stakeholders that strengthen the Transformation programme.
- Access to opportunities across the industry.



TRANSFORMATION COMMITTEE 2020/2021		
	NAME	REPRESENTING
1	Rodney Mbuyazi (Chairperson)	Eastern District (KwaZulu-Natal)
2	Vuyani Kama (Vice-Chairperson)	South Eastern District (North Western Cape, Eastern Cape)
3	Egan Duminy	Southern District (Western Cape, Sandveld, Ceres, Southern Cape, South Western Cape)
4	Enos Mahwai	Central District (Gauteng)
5	Mike Green	Potato producer (appointed by the Board of PSA (NPC))
6	Jakkie Mellet	Seed potato producer (as nominated by the National Seed Potato Growers' Committee)
7	BM Mpyana	National Agricultural Marketing Council (NAMC)
8	Never attended	Association of Veterinary and Crop Associations of South Africa (AVCASA)
9	Stanford Manthata	Department of Agriculture and Rural Development (LDARD)
10	Shadrack Mabuza	Potato Industry Development Trust (PIDT)
11	Dr André Jooste/ Willie Jacobs	Chief Executive Officer (PSA)
12	Nomvula Xaba	Transformation Manager (PSA)
13	Louis Pretorius	Transformation Coordinator (PSA)
14	Masabatha Motsoaneng	Transformation Specialist (PSA)
15	Laryssa vd Merwe / CorpStat	Company Secretary (PSA)



MARKETING



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

The GPP function focuses on the local marketing environment and aims to stimulate demand as well as increase per capita consumption. The MAD function looks at product innovation, development and strives to facilitate a seamless trading environment for producers within and outside the Republic of South Africa.

The 2020/2021 fiscal was like no other. All South Africans watched in shock and disbelief how a sub-microscopic infectious agent that replicates only inside the living cells of an organism turned the world on its ear. And ... with one dreaded pronouncement by the President of the country, the lives of many South Africans and businesses were changed forever. For the potato industry, in particular the generic marketing of potatoes, it was an opportune time to re-invent key communication messages and mediums for relevance and resonance.

Level 5 lockdown in South Africa was implemented on 27 March 2020. Consumption of digital content through increased exponentially forcing brands and the broader business to redirect their media spend to where the people were - at home, on phones, laptops, and Broadcast TV. The digital revolution was already at the boil, but COVID-19 speeded up the process.

Potatoes South Africa's digital resources played an instrumental role in staying connected to consumers and delivering on the Marketing Division's strategic vision to inform, educate and inspire targeted consumer markets. The biggest lesson learned during these unprecedented times has been how to capitalise on PSA's digital resources to communicate with all stakeholders efficiently, succinctly, and efficiently through new media.

In the second half of the 2020/2021 financial year, the Marketing Division gave birth to an improved, easy to navigate and contemporary one-stop portal for imparting current news, information and product related content earmarked consumer education to make informed decisions when it comes to purchasing and using potatoes in a new world order. Potatoes are the fourth most significant crop in the world after maize, wheat, and rice. This makes potatoes the number one non-grain food crop globally. South African consumers now have access to a treasure trove of information that can be accessed through: **www.potatonation.co.za**.

Food security continues to be at the heart of PSA's promise to make available a fresh, nutritious, and easily accessible product to all South Africans. The Marketing Division understood the need to not only engage with stakeholders during times of hard lockdown, but to show compassion as well. As such, with radio heralded as a trusted source of news, the Marketing Division launched a national radio campaign aimed at rallying behind all potato producers, pronounce the industry's attentiveness to deliver on its promise of food security, and convey the potato industry's support of Government's efforts in fighting the COVID-19 pandemic through its national campaign: ***Stayhome, save South Africa.***

To ensure that potatoes remain top of mind and become an easy purchase decision for all consumers, the Marketing Division rolled out a yearlong public relations campaign which ultimate result was to:

- Reposition potatoes as a COVID-19 strong vegetable and carb.
- Communicate potatoes as a tasty, versatile, convenient and affordable product.
- To inspire goodwill to the potato value chain by pioneering the inaugural State of the Potato Industry Address (SOPIA) event.

The SOPAI event was a resounding success, generating free media exposure well over R400 000. The quality of discussions that transpired, confirm that the potato industry is one to be reckoned with in respect of its contribution to GDP, employment and food security.

A key highlight worth mentioning is the successful renewal of the Heart Mark. The endorsement of potatoes by the Heart & Stroke Foundation of South Africa (HSFSA) is a huge achievement, given the bad rap potatoes sometimes receive from media and some

health professionals. The Heart Mark endorsement programme is part of ongoing efforts by the Heart and Stroke Foundation to reduce the number of deaths in South Africa from preventable heart disease and stroke. The endorsement programme forms part of a health-enabling environment offering organisations a tool which makes choosing healthier foods easier. It, therefore, is understood that the endorsement bodes well for amplifying ongoing efforts to position potatoes as a nutrient dense food.

PSA launched a successful television and radio campaign, which provided viewers/listeners with a clear message of the farm to fork journey.

MARKETING PROJECTS

MARKET / TRADE INTELLIGENCE

In the 2020/2021 fiscal year, one project was carried out under the Market & Trade Intelligence project namely: Import/Export Monitoring.

In the year under review the focus was on the import side with focus on frozen French fries from Europe. The division gathered and analysed monthly statistics of tariff line 2004.10.20, which served as a catalyst lobbying government to protect the local industry from dumping. In the case of South Africa, there is an ongoing battle between our local agriculture sector and global importers, with South Africa being considered a prime destination for dumping frozen and processed potato products. Anti-dumping duties, which have been in place since 2016, have protected local industry to a large extent. However, these duties have recently been terminated, leading to an anticipated influx of cheap potato chips from Europe, and putting the South African potato industry under severe threat.

Imports of frozen French fries declined since the implementation of trade remedies from 46,904 tons in 2010 to 18,417 tons in 2020. This represents a percentage decline of 61% in a decade. In the months January and May 2021, 11.8 million kilograms of frozen fries were imported into South Africa between January & May 2021, which represents the highest year-to-date volumes when comparing to the years 2019 and 2020.

Potatoes South Africa and members of the Potato & Vegetable Processors Forum (PVPPF) are working around the clock to have anti-dumping duties re-instated after they officially lapsed in June 2021.

CONSUMER / TRADE EDUCATION

Content creation remains an integral tool for formulating marketing communication messages that are professionally researched, backed by science, and generated through expert opinion and thought leadership. To this end, the generic promotion of potatoes relies heavily on content generation.

The division commissioned work for the development of recipes (videos and stills) nutritional articles that were used to undertake the strategic mission of the marketing division to inform, educate and inspire current and potential consumers about the many ways in which potatoes can be prepared and incorporated into a balanced, healthy, tasty and affordable meal.

GENERIC PRODUCT PROMOTION

Generic promotion is the cooperative effort to increase demand for products which are similar. The strength of generic promotion lies in its ability to benefit all producers as opposed to brand promotion that only increases the share of the market for only a select few. The Marketing Core Business uses a subset of the marketing mix – the promotional mix. The promotional mix is used by marketers to communicate with identified consumer markets to fulfill organisational goals and objectives.

THE DIVISION DEPLOYS THE PROMOTIONAL MIX ELEMENTS OF:

- Media and Public Relations
- Television and radio
- Digital Marketing (consumer website and social media)

THE OBJECTIVES OF THIS PROJECT CATEGORY ARE TO:

- Reach consumers through varied mass media channels.
- To strengthen the product offering to target audiences through strategic marketing communication.
- To promote the consumption and use of potatoes to target consumer segments.
- To measure the efficacy of all advertising and promotional campaigns through focus groups.

IN RESPECT OF TELEVISION AND RADIO ADVERTISING:

- Eight (8) new radio and television commercials produced.
- Television commercials launched on SABC 1 and 2 from 1-31 December 2020, 25 March – 8 April 2021 and 7-21 June 2021.
- Radio commercials launched on Metro FM and RSG from 1 February to 11 March as well as 30 May to 29 June.

- For the first time the division commissioned a focus group study aimed the effect and impact of the newly produced commercials, the communication message contained in the commercials as well as the suitability of the mediums chosen for advertising.
- All television and radio commercials performed reaching well over 30 million South Africans in the middle-income segment and achieving an average frequency of 3.8.

The Marketing Division's Media & Public Relations efforts were intentional in the year under review. The rationale was to achieve positive, meaningful, and maximum impact for all interventions, using classical PR.

THREE CAMPAIGNS WERE IMPLEMENTED, ACHIEVING GREAT SUCCESS AS FOLLOWS:

- **First campaign:** Amazambane for Life successfully executed in October/November 2020, acquiring free media exposure of R164 467.90
- **Second Campaign:** Our Potatoes, your way successfully executed in November/December 2020, acquiring free media exposure of R786 871.46
- **Third campaign:** State of the Potato Industry Address, amassing free media exposure of R400 009
- Total media earned in the year under review: R1 351 348.36.

The Marketing Division through well conceptualised and executed PR campaigns was able to add over R1 million to its advertising spend through media coverage gained on well-motivated, credible and narrated marketing communication.

The consumer website together with well performing social media platforms have enabled the division to reach a multitude of consumers and deliver consumer oriented product content such as health, nutrition, recipes, fun facts, and information.

UPON REVAMPING THE CONSUMER WEBSITE WWW.POTATONATION.CO.ZA THE FOLLOWING IMMEDIATE RESULTS WERE REALISED:

- **6 461 PAGE VIEWS** in April 2021 representing an increase of 614% when compared to January statistics.
- **1 256 MONTHLY USERS** in April representing a jump of 155% compared to January 2021.
- The **BOUNCE RATE DECLINED FROM 88% TO 66% IN APRIL**, a clear sign that site visitors are staying longer on the new page and exploring more.

TRADE / INDUSTRY RELATIONS

PSA has been an active member participant in Project Rebirth since its inception. Project Rebirth was established to improve the standard operations and effective management of national fresh produce markets. A key success of the project was the development of the Codes of Best Practice which have seen ailing markets such as East London rise to the top five of best performing markets.

COVID-19 had an adverse impact on the work of Project Rebirth. It was impossible to undertake market visits and secure meetings with stakeholders in the first 6 months of the 2020/2021 financial year. As such, only two meetings took place with Nelson Mandela Bay Market and Tshwane Market.

The Project Rebirth steering committee drafted and sought opinion on a Bill for submission to Parliament pertaining to the development of a national fresh produce market agency in the previous financial year. The NFPDM Bill was not supported by the Office of the Chief State Law Advisor (OCSLA) on the basis that the Bill violates sections 44, 151 and 156 and schedule B of the Constitution where NFPDMs are deemed a local government function. National Departments do not have legislative competence to regulate NFPDMs. Only municipalities are vested with the power to enact bylaws regulating markets within their jurisdiction.

Had the draft Bill been approved, it would have been a game changer in the sale of fresh produce through national fresh produce markets. Although the draft Bill was rejected, the battle for the sale of fresh produce through national fresh produce markets in the current format remains an ongoing challenge for the fruit and vegetable agricultural sectors. As such, Project Rebirth remains a much-needed committee to initiate change through dialogue and concentrated local municipality lobbying.

TRADE / INDUSTRY RELATIONS

The project category market access and development focused efforts on monitoring and seeking remedial actions in industry-related issues such as the dumping of French fries on the South African market. As such the key focus areas in the year under review were combating any measures that hampered fair trade, crippled producer profitability and impeded industry growth.

PSA, in collaboration with members of the Processing Forum have pursued a Sunset Review (SSR) application for the anti-dumping duties for Belgium and the Netherlands. Due to COVID-19, ITAC's investigation into the matter has been hampered.

The industry’s anti-dumping duty protection recently lapsed in June 2021. An application had been made for the reinstatement of the tariff for another five years, but local regulator, the International Trade Administration Commission of SA did not complete it on time.

PSA has lodged a new application which can take 6-18 months to conclude. In the interim, the Marketing Division in close working with members of the PVPF will closely monitor the volumes of imported French fries and associated impact to the local industry.



MARKETING COMMITTEE 2020/2021

	NAME	REPRESENTING
1	Rudi Heinlein	Chairperson, Limpopo
2	Jannie Basson	Sandveld, Eastern Cape, Ceres, Southern Cape, South Western Cape
3	Nicolaas Lourens	KwaZulu-Natal, Eastern Free State, North Eastern Cape
4	Johan Holtzhausen	Mpumalanga, Gauteng, Loskopvallei
5	Werner du Plessis / Izak Cronje	North West, Northern Cape, Western Free State, South Western Free State
6	Gerhard Posthumus	Chairperson: National Seed Potato Growers
7	Deon van Zyl	Institute of Market Agents South Africa (IMASA), Potato Industry Development Trust (PIDT)
8	Tutti Rudman	South African National Consumer Union (SANCU)
9	Mathilda van der Walt	National Agricultural Marketing Council (NAMC)
10	Elvis Nakana	Department of Agriculture, Land Reform and Rural Development (DALRRD)
11	VACANT	SA Informal Traders Association (SAITA)
12	André Young	SA Union of Food Markets (SAUFM)
13	VACANT	Consumer Goods Council of South Africa (CGCSA)
14	Anthony Viljoen	Processors’ Forum
15	Dr André Jooste / Willie Jacobs	CEO: (PSA)
16	Immaculate Zinde	Manager: Marketing and Genetic Product Promotion (PSA)
17	Phindiwe Nkosi	Marketing Specialist

*Together towards excellence in
the potato industry.*



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