

Chairman's Report

19TH ANNUAL GENERAL MEETING OF THE SOUTHERN AFRICAN GRAIN LABORATORY NPC



MR. BOIKANYO MOKGATLE
CHAIRPERSON 2015/2016

Introduction

It is an honour to deliver the 19th Chairperson's Report of the SAGL for the financial year 2015/2016. Strengthened focus on reliable quality control measurements at different stages of the value chain remain key to the success of the grain and oilseed industries in Southern Africa. Currently there is also emphasis on the drivers of Agricultural and Nutritional Policy Change which confirms the need for accurate quality measurements on grain and associated products. The results of research studies and quality surveys direct agricultural research as well as formulate policies such as the micronutrient policy.

Quality analyses conducted in the SAGL's laboratories support research and development for effective marketing of South African grain and oilseeds serving the interest of the South African Industry. The different Agricultural Trusts support the SAGL financially to perform National Crop Quality Surveys on agricultural commodities such as wheat, maize, soybeans, sunflower seeds and grain sorghum. SAGL applies globally recognised procedures and methods to ensure traceability to international standards. The results generated in the different testing areas of the SAGL are thus reliable and accurate to ensure that quality data can be compared over several production seasons.

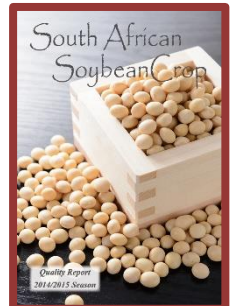
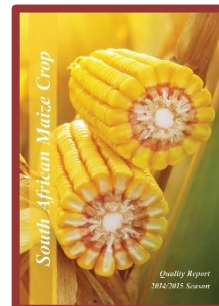
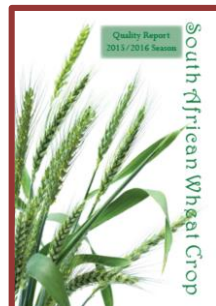
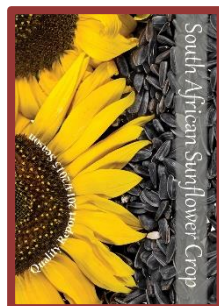
The quality of imported grain is evaluated using the same scope of quality tests generating information needed to develop strategies to improve local competitiveness.

SAGL also provides consultancy, training and testing services for countries in the rest of Africa.

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Crop Quality Reports





Ms. MARIANA PURNELL
EXECUTIVE COMMITTEE MEMBER



Mr. BOIKANYO MOKGATLE
CHAIRPERSON



Mr. DE WET BOSHOFF
VICE CHAIRPERSON

EXECUTIVE COMMITTEE MEMBERS

DR. CHRISTÉL COETZEE
PROCESSING: ANIMAL FEED

DR. WILLEM BOSHOFF
BREEDING: WHEAT

MR. KEVIN CLARKE
PROCESSING: WHEAT

MR. DEREK MATHEWS
PRODUCTION: WHEAT

MR. BAREND WENTZEL
RESEARCH

DR. MARINDA VISSER
PRODUCTION: MAIZE

MR. GEOFF PENNY
BAKING

MR. MARCEL KOEKEMOER
BREEDING: MAIZE

MR. HANNES HAASBROEK
PRODUCTION: SOYBEAN

MR. JANNIE DE VILLIERS
ALTERNATE DIRECTOR FOR
DR. MARINDA VISSER

BOARD OF DIRECTORS 2015/2016



Ms. SYLVIA DU PREEZ
CUSTOMER LIAISON



Ms. PAULINA MODIBA
SENIOR ANALYST/
QUALITY CONTROL



Ms. CECILIA BREEDT
TECHNICAL SPECIALIST



Ms. HANNALIËN MEYER
TECHNICAL SPECIALIST



Ms. WIANA LOUW
GENERAL MANAGER



Ms. ZELDA FEKKEN
PA TO THE GM (TEMP)



Ms. JOLANDA NORTJÉ
MANAGER LABORATORY



Ms. MARIE MEYER
MANAGER FINANCE

MANAGEMENT TEAM



DR. CORINDA ERASMUS
TECHNICAL SPECIALIST
PROJECT CONSULTANT



Figure 1



MR. JAFTA KOBOLA
DAFF INTERN



Ms. THESESA DE BEER
MAIZE TRUST INTERN



Ms. SYLVIA PHOKANE
MAIZE TRUST INTERN

STAFF COMPONENT

"The greatest pleasure in life is doing what people say you cannot do" ~Walter Bagehot

COMMITTEES

Employment Equity Committee



MS. MAMSY
MOTLANTHE



MS. MARIE MEYER
MANAGER FINANCE



MS. WIANA LOUW
GENERAL MANAGER



MS. LEBOGANG
MALAHLELA



MS. MAPHELA
RAMARE



MR. THABANG
NKODIMO

SAGL's transformation goals are clearly defined in the Employment Equity Plan. The members of the Employment Equity Committee received external training to complement the in-house training provided. The Employment Equity committee meetings are held on a regular basis and provide an opportunity to discuss issues with regards to the achievement of our set goals. At monthly personnel feedback meetings, the outcomes of the EE meetings are shared with the rest of the personnel.

Health & Safety Committee



MS. MAMSY MOTLANTHE
CO-OPTED MEMBER OF
HEALTH & SAFETY TEAM



MS. JULIA NTIMANE
FIRST AID OFFICER



MS. WIANA LOUW
GENERAL MANAGER



MS. DUDU MOLEKE
HEALTH & SAFETY
REPRESENTATIVE



MS. JIANNI KRUGER
HEALTH & SAFETY
REPRESENTATIVE



MR. JAPHTA MODISE
FIRE MARSHALL – FIRE
FIGHTING OFFICE



MR. LIEB BADENHORST
SUPERVISOR MILLING AND
PHYSICAL ANALYSES /
GRADER



MS. HANNA LIEN MEYER
TECHNICAL SPECIALIST



MR. DANIEL MSIZA
FIRST AID OFFICER



MS. JOLANDA NORTJÉ
MANAGER LABORATORY



MR. JOHANNES MKASI
FIRE MARSHALL

The safety team, in collaboration with the other laboratory personnel, conducts monthly Health and Safety Inspections and compiles a report. The findings of the inspections are followed up in OHS team meetings. The members of the team annually receive external training in combination with internal training sessions which are a standing item on the agenda of the monthly personnel feedback sessions.

"Learn to smile at every situation. See it as an opportunity to prove your strength and ability." ~ Joe Brown

STRATEGIC INTENT, AIM & VALUE STATEMENTS

- STRATEGIC INTENT**
To be recognized as market leader in grain and oilseed analysis and related services in Southern Africa.
- AIM**
To be the analytical service provider of choice for the grain and oilseed industries to enhance competitiveness and sustainability.
- VALUE**
Accurate measurements, agricultural prosperity, social responsibility and good governance.

CORE BUSINESS

To ensure alignment with the needs of the broader grain and oilseed industry, SAGL's Board of Directors held a *Strategic Planning Session* during February 2016. The *Key Objectives* of the SAGL were discussed and prioritised. The core function of the laboratory remains to provide food safety and nutrition testing services in a reference laboratory capacity. The results generated through national quality surveys on grains and oilseeds provide the basis for decision making to ensure a consistent supply of grain compliant with specific requirements applicable to the needs of the different industries in the grain and oilseed value chain. SAGL engages with all stakeholders to ensure a good understanding of market requirements relating to quality as well as to maintain and increase access to high-value markets. Collaborative research studies with academic institutions and commercial processing companies are some of the ways in which we fulfil our mandate. SAGL is involved in initiatives where both the private and public sector are working together to find workable solutions relating to food fortification to address public health issues.

The 75 different testing methods included in the scope of testing will expand to five categories during 2017 with the addition of the new Crop Protection Division as illustrated in Figure 2.

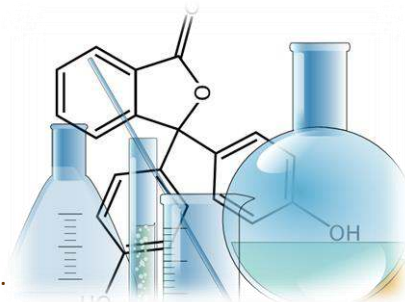


Figure 2: SAGL's core business consists of testing methods in five categories.

"Reach for the stars, even if you have to stand on a cactus." ~ Susan Longacre

CORE BUSINESS

During the 2015/2016 financial year 54 866 analyses were performed in the four different testing categories compared to the 48 990 in the previous (2014/2015) financial year. The 287 customers SAGL serviced during 2015/2016 represented both local and international companies from different sectors of the grain and oilseed industry. The number of customers as well as the number of analyses increased year-on-year.

ANALYSES PER LABORATORY OVER THE LAST THREE YEARS

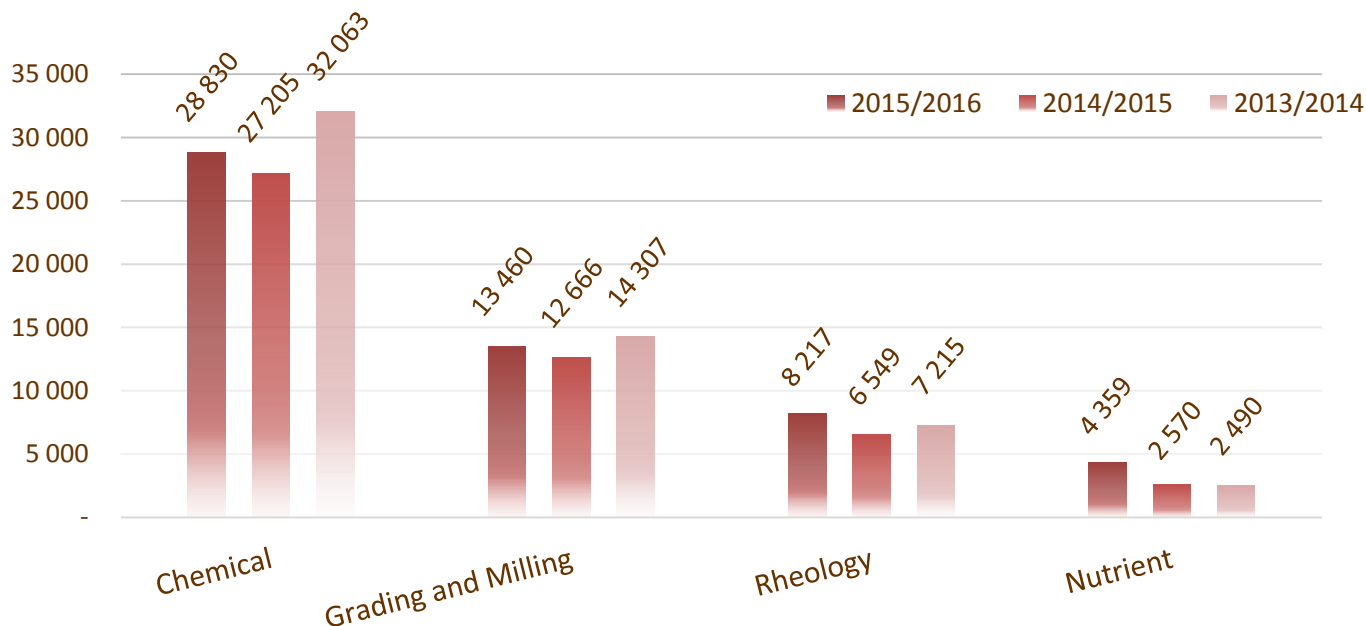


Figure 3: The distribution of the number of analyses performed by the different laboratories over the past three financial years.

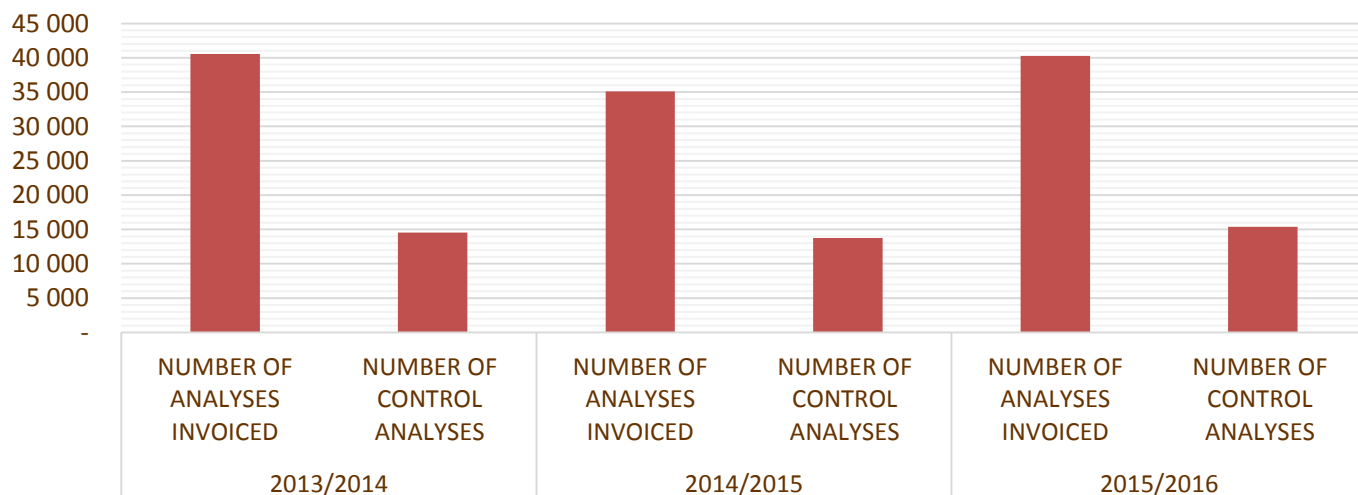


Figure 4: The number of analyses done over the last three years versus quality control samples analysed.

"Too many people miss the silver lining because they're expecting gold." ~ Maurice Setter

Marketing Initiatives

Proposed changes to the testing requirements for the registration of agro-chemicals under the *Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act 36 of 1947* were announced in 2014 following subsequent requests from role-players in this industry to establish a testing facility at the SAGL in line with the OECD Principles of GLP, the SAGL embarked on this laboratory expansion process during 2015/2016. This was a logical extension already identified during a strategic planning session held in 2012. Different funding models for this extended SAGL testing capability were investigated. The written intent from several agrochemical companies to support this laboratory once it becomes operational and accredited, strengthened the SAGL's application and culminated in a successful application for a loan from Standard Bank.



SAGL has now also successfully established the capability to conduct complete scope of analysis for the parameters to evaluate the potential of grain sorghum cultivars for bioethanol production. Previously part of the work had to be subcontracted.

Collaboration established with agribusinesses to implement the newly developed Milling Index Calibration, both to optimise the milling yield when processing white maize and to select cultivars for production in specific regions.



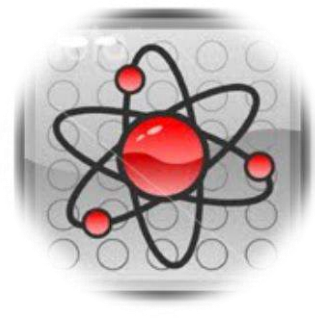
SAGL has embarked on product development processes for food companies using the Rapid Visco Analyser (RVA) technique which was implemented in our laboratory a few years ago.

With funding from the Maize Trust and Winter Cereal Trust, SAGL conducted data mining projects on the quality data generated over many years as part of the National Annual Crop Quality Surveys on maize and wheat. The statistical tools developed as part of these projects are now being discussed with different industry sectors to adapt it for their specific applications.



In partnership with suppliers of milling equipment, SAGL expanded its training activities by developing training courses specifically focussed on the processing industry and co-presented by international experts.

New mycotoxin regulations published during 2016, has resulted in an increased focus on the measurement of mycotoxin levels in all stages of the grain value chain. With funding from the Maize Trust, SAGL is currently evaluating mycotoxin screening kits for accuracy and ease of use to encourage more mycotoxin testing. This will ensure better management and control of mycotoxins and improved food safety.



SAGL was actively involved in the collaborative process between the Department of Health and Industry to evaluate and implement improved micronutrient fortification in an effort to improve public health.

SAGL attends numerous Technical Committee meetings of the different Industry associations to ensure alignment with changes relating to regulations as well as additional industry requirements.

PRESENTATIONS

- *Feedback on SAGL activities with special focus on wheat* – Wheat Forum Meeting 9 October 2015, Wiana Louw
- *Feedback on SAGL activities with special focus on grain sorghum* – Sorghum Forum Meeting 6 November 2015, Wiana Louw
- *Feedback on SAGL activities with special focus on maize* – Maize Forum Meeting 25 November 2015, Wiana Louw
- *Services to the grain and oilseed industries in South Africa* – Grain SA Western Cape members – 1 March 2016, Wiana Louw
- *Determination of good milling quality for white maize for human consumption*, Grain Network Meeting, Reims, France, 16 – 18 March 2016, Wiana Louw
- *Testing requirements and capabilities for the grain industry*, Department of Agriculture Forestry and Fisheries, 18 April 2016, Wiana Louw
- *Feedback on quality surveys on soybeans and sunflower and SAGL value proposition*, Oilseeds Advisory Committee Meeting 26 April 2016, Wiana Louw
- *The importance of correct sampling procedures*, GOSA Symposium 21 July 2016, Wiana Louw
- *Agbiz Grain Mini Symposium (August 2016) - The triple bottom line:*
 - *Evaluation of mycotoxin quick test detection kits*, Wiana Louw
 - *Wheat data-mining – quality trends in South Africa over 12 years*, Dr Corinda Erasmus

- *An overview of the multi-mycotoxin occurrence in South African produced maize, ChromSAAMS*, 12 September 2016, Hannalien Meyer

POPULAR ARTICLES

Wheat focus/ Koringfokus

- *Wheat crop quality of the 2014/2015 production season*, Jolanda Nortjé

*Jolanda Nortjé
Wheat Focus
Author of the year - 2015*



SA Grain/SA Graan

- *An overview of the local wheat crop quality of the 2014/2015 production season*, Jolanda Nortjé
- *A look at the quality overview of the 2014/2015 maize crop*, Jolanda Nortjé
- *A look at the soybean crop quality of the 2014/2015 production season*, Jolanda Nortjé
- *Sunflower crop quality of the 2014/2016 production season*, Jolanda Nortjé

Oilseeds Focus

- *Preliminary Soybean and Sunflower crop quality survey results for the 2014/2015 season*, Jolanda Nortjé
- *Soybean crop quality of the 2014/2015 production season*, Jolanda Nortjé
- *Sunflower crop quality of the 2014/2015 production season*, Jolanda Nortjé

"The road to success is always under construction." ~ Lily Tomlin

PROFESSIONAL AFFILIATIONS

SAGL IS REPRESENTED ON THE FOLLOWING COMMITTEES/ASSOCIATIONS:

- ✓ AFMA: Animal Feed Manufacturers Association
- ✓ AgriLASA: Agri Laboratory Association of South Africa
- ✓ Campden BRI (UK Based)
- ✓ ChromSA: Chromatographic Society of South Africa
- ✓ Co-opted on Technical Committees of (AFMA), (NCM) and (SACB)
- ✓ Crop Life South Africa
- ✓ CST-SA: Cereal Science and Technology
- ✓ GOSA: Grain Handling Organisation of South Africa
- ✓ IAOM: International Association of Operative Millers in the the Middle East & Africa
- ✓ Maize Trust Mycotoxin Research Review Panel
- ✓ NLA: National Laboratory Association of South Africa
- ✓ SAAMS: South African Association for Mass Spectrometry
- ✓ SAAFoST: South African Association for Food Scientists
- ✓ Technical Committees of the Winter Cereal Trust
- ✓ Wheat Focus Editorial Committee



LABORATORY VISITS / DELEGATIONS

- Prof. Perry Ng, Michigan State University – 7 March 2016
- Sorghum Trust Trustees – 8 March 2016
- Dr. Filip van Bocksteale, Faculty of Bioscience Engineering, Gent University and Dr. Quentin Johnson, Food Fortification Initiative – 18 April 2016
- Andrew Conner and Manuel Sanchez, U.S Grains Council, Washington – 10 May 2016
- Prof. Peter Cotty, USDA and University of Arizona – 19 May 2016
- Maize Trust Trustees - 30 June 2016
- Dr. Markus Kainz, Romer Labs Diagnostics, Tulin Austria and Dr. Denis Giraudoux, Biomin, France – 20 September 2016
- Dr. Timothy Dalton and Dr. Kira Everhart-Valentin, Feed the Future Lab for Collaborative Research on Sorghum and Millet, Kansas State University – 10 October 2016

Human Capital

The skilled and motivated staff complement which enables the SAGL to compete on an international level is achieved through an effective skills development programme. SAGL's business initiatives focus on the development of a sophisticated testing environment that is stimulating enough to attract scarce technical and scientific skills.

An in-house, on-the-job training programme forms part of the annual Management Review process to improve the skills base. All the laboratory personnel received both in-house and external training during the period under review.

To enhance the technical capability of the laboratory personnel, Ms. Lebogang Malahlela is financially supported to complete her final year of study towards a diploma in Analytical Chemistry.

With financial support from the Winter Cereal Trust (WCT), Ms Mamsy Motlanthe was invited to join a team of researchers on a visit to wheat breeding programmes in Turkey and Kazakhstan, and to attend the ICC conference in Turkey during April 2016.

NEW APPOINTMENTS

Ms Zanele Skhosana took up a permanent position to fill a vacancy in the Nutrient laboratory on completion of her 12 month internship at the SAGL.

Ms Theresa de Beer and Ms Sylvia Phokane joined the SAGL in January 2016 for their 12 month internship programme with financial support from the Maize Trust.

Under a placement agreement with the Department of Agriculture Forestry and Fisheries (DAFF), Mr Jafta Kobola joined the SAGL team during June 2016 on an internship to gain experience in the rheology laboratory.

Two experts in the field of pesticide formulation analyses and the OECD Principles of GLP were appointed to establish the new Crop Protection Division.



MS. ZANELE SKHOSANA



MS. CECILIA BREEDT



MS. GERTY PIETERSE



MS. THERESA DE BEER



MS. SYLVIA PHOKANE



MR. JAFTA KOBOLA

"Happiness is something that comes into our lives through doors we don't even remember leaving open."

~ Rose Lane

Events at SAGL

LAST WORK DAY OF 2015 - 24 DECEMBER 2015

The team ended the year on a festive note with a Christmas Breakfast – a great opportunity to wish everyone a blessed festive season and thank each and every team member for another successful and productive year.



NATIONAL HERITAGE DAY - 23 SEPTEMBER 2016

We celebrated Heritage Day and a colleague's birthday on the 23rd of September 2016 with interesting traditional food and colourful clothes.



"Very little is needed to make a happy life, it is all within yourself, in your way of thinking." ~ Marcus Antoninus

EXTERNAL TRAINING

SAGL carefully selects the external training courses to ensure that both technical and administrative needs are addressed. Figure 5 summarises the training attended during 2015/2016. The list below is an indication of the type of training events attended:

- ✓ Basic Conditions of Employment Act
- ✓ Basic Spreadsheet Training
- ✓ B-BBEE
- ✓ Consumer Protection Act
- ✓ Employment Equity
- ✓ HIV/AIDS in the Workplace
- ✓ Junior Management & Supervisor Training
- ✓ Labour Law in the Workplace
- ✓ Leadership & Mentoring
- ✓ Occupational Health & Safety
- ✓ Technical Writing Skills
- ✓ Grain analysis: Today and Tomorrow
- ✓ Reducing mycotoxins in food and feed in Africa
- ✓ Root cause analysis for laboratories

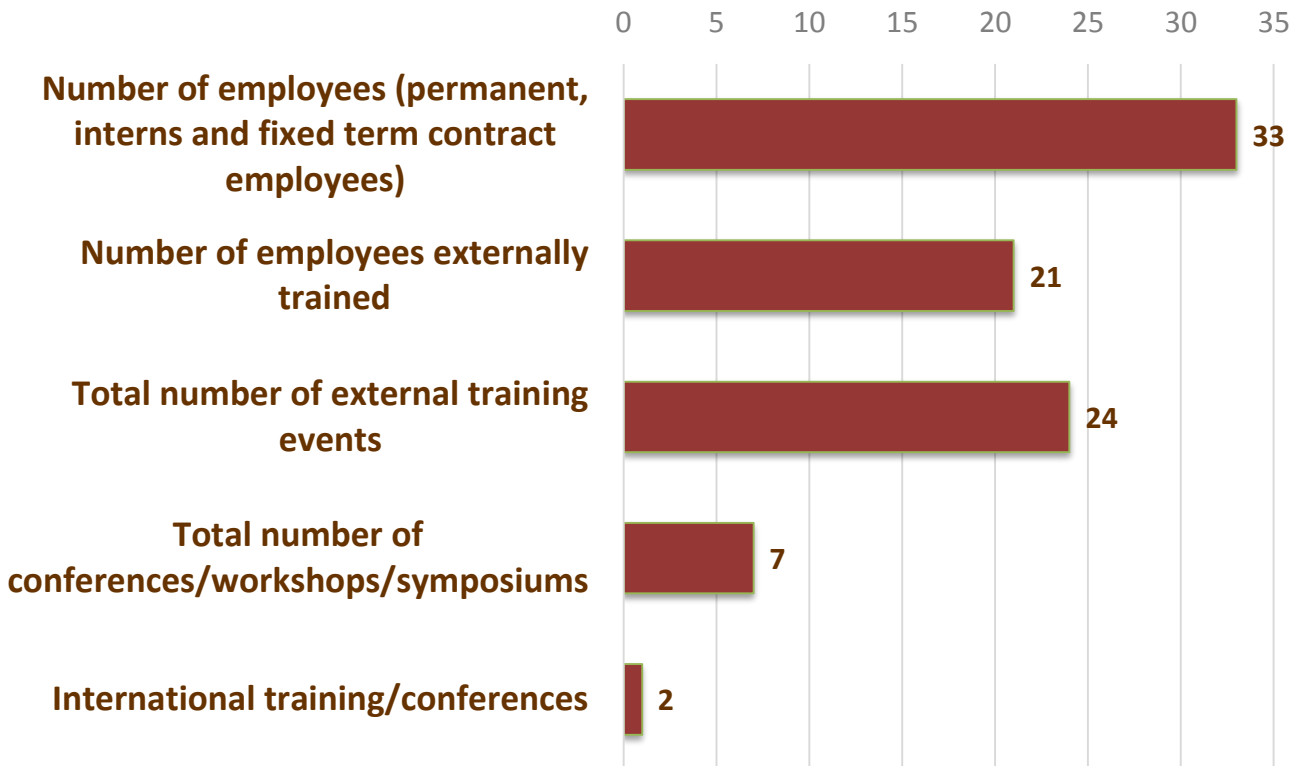


Figure 5: External training during 2015/2016.

"Wisdom is knowing what to do next, virtue is doing it." ~ David Star Jordan

TRAINING PRESENTED

The training courses presented by staff at the SAGL are designed to address the specific needs of the participants from South Africa as well as from the rest of Africa. The training courses cover both theoretical aspects and hands-on practical training in the laboratory. The requirements of compliance with ISO 17025 accreditation and general good laboratory practices are emphasized in the training courses.



3 - day and 4 - day wheat and flour training courses

- Total: 7 trainees

4 - day Grading Training course (wheat, maize and soybeans)

- Total: 3 trainees

2 - day Maize and Maize meal training course

- Total: 6 trainees

5 - day US Wheat - wheat and flour training course

- Total: 12 trainees

3 day Technical and quality related training course in collaboration with Brabender and Buhler

- Total: 8 trainees

PROFICIENCY TESTS OFFERED

In its capacity as reference laboratory for grains and oilseeds, SAGL offers proficiency tests to participants from South Africa and other countries in Africa. For the past four years SAGL has acted as the expert laboratory for the East African Proficiency Scheme (EAPT).

The participants use the ring tests as independent assessments of their quality control measures to monitor equipment, personnel and analytical methods. These proficiency tests serve as a powerful tool for a laboratory or testing facility to demonstrate competency to stakeholders in the grain and oilseed sector. The ring tests offered by the SAGL detailed in Table 1 below.

Please refer to our website for the price list and to download the participant application form: www.sagl.co.za

Table 1: Proficiency tests offered by the SAGL.

SAGL PROFICIENCY TESTS							
DESCRIPTION	# / YEAR	INTERVAL	PRODUCT	LOCAL PARTICIPANTS	INTERNATIONAL PARTICIPANTS	COUNTRIES	TOTAL
SAGL ANNUAL PRE-HARVEST MAIZE GRADING RING TEST	1	Per Season	Maize	62	-	-	62
SAGL ANNUAL PRE-HARVEST SOYA BEANS GRADING RING TEST	1	Per Season	Soya beans	60	-	-	60
SAGL COLOUR RING TEST	6	Bi-monthly	Wheat flour	8	2	Lesotho & Namibia	10
SAGL MINOLTA DRY COLOUR RING TEST	6	Bi-monthly	Wheat flour	8	-	-	8
SAGL MAIZE GRADING RING TEST	4	Quarterly	3 x White Maize 1 x Yellow Maize	8	2	Lesotho & Namibia	10
SAGL MAIZE MEAL QUALITY RING TEST	4	Quarterly	2 x Super Maize Meal 2 x "Special" Maize Meal	2	3	Swaziland, Lesotho & Namibia	5
SAGL WHEAT GRADING RING TEST	4	Quarterly	Wheat	22	1	Namibia	23
SAGL WHEAT AND FLOUR RING TEST	4	Quarterly	Wheat and Wheat flour	20	6	Ghana, Nigeria, Lesotho, Swaziland, Senegal & Namibia	26
SAGL VITAMIN RING TEST	4	Quarterly	1 x Wheat Flour & Rice Flour 2 x Maize Meal & Wheat Flour 1 x Premix & Maize Meal	1	1	Kenya	2

"A healthy attitude is contagious; let others catch it" ~ Charles F. Glassman

DETAIL OF PROFICIENCY TESTS OFFERED

MAIZE

ANNUAL PRE-HARVEST GRADING RING TEST

- ✓ PRODUCT TYPE: 250 g Maize
- ✓ INTERVAL: Per Season
- ✓ # PARTICIPANTS: 22

MAIZE MEAL QUALITY RING TEST

- ✓ PRODUCT TYPE: 1 kg Super / Special Meal
- ✓ INTERVAL: Quarterly
- ✓ TYPES OF ANALYSIS:
 - ✓ Speck count, Particle size, Moisture, Fat, Fibre, Protein, Ash and Whiteness Index
- ✓ # PARTICIPANTS: 5

MAIZE GRADING RING TEST

- ✓ PRODUCT TYPE: 250 g White / Yellow Maize
- ✓ INTERVAL: Quarterly
- ✓ # PARTICIPANTS: 8

VITAMIN

VITAMIN RING TEST

- ✓ PRODUCT TYPE: *(Subject to change)*
 - ✓ Fortified Wheat Flour & Premix
 - ✓ Fortified Maize Meal & Premix
 - ✓ Fortified Maize Meal & Wheat Flour
- ✓ INTERVAL: Quarterly
- ✓ TYPES OF ANALYSIS:
 - ✓ Vitamin A
 - ✓ Pyridoxine HCL (Vitamin B6), Thiamine mononitrate (Vitamin B1), Nicotinamide (Vitamin B3), Riboflavin (Vitamin B2) and Folic Acid
- ✓ # PARTICIPANTS: 2

SOYBEANS

ANNUAL PRE-HARVEST GRADING RING TEST

- ✓ PRODUCT TYPE: 250 g Soybeans
- ✓ INTERVAL: Per Season
- ✓ # PARTICIPANTS: 13

WHEAT

WHEAT & FLOUR RING TEST

- ✓ PRODUCT TYPE:
 - ✓ 2 kg Whole Wheat
 - ✓ 2.5 kg White Bread Flour
 - ✓ 250 g Brown Bread Flour
 - ✓ 50 g White Bread Flour
- ✓ INTERVAL: Quarterly
- ✓ TYPES OF ANALYSIS:
 - ✓ **White Bread Flour:** Moisture, Colour, Falling number, RVA falling number equivalent, Protein, Ash, Starch damage, Wet gluten, Dry gluten, Gluten index, Farinograph, Alveograph, Consistogram, Extensigraph and Mixograph
 - ✓ **Whole Wheat Sample:** Hectolitre mass, Whole wheat moisture, Whole wheat flour-moisture, Protein, Falling number, RVA falling number equivalent, Wet gluten, Dry gluten and Mixograph
 - ✓ **Brown Bread Flour:** Bran content and Colour
- ✓ # PARTICIPANTS: 28

WHEAT GRADING RING TEST

- ✓ PRODUCT TYPE: 1,5 kg Whole Wheat
- ✓ INTERVAL: Quarterly
- ✓ # PARTICIPANTS: 18

MINOLTA DRY COLOUR RING TEST

- ✓ PRODUCT TYPE:
 - ✓ 500 g White Bread Flour
 - ✓ 500 g Cake Flour
- ✓ INTERVAL: Bi-Monthly
- ✓ # PARTICIPANTS: 7

KENT JONES COLOUR RING TEST

- ✓ PRODUCT TYPE:
 - ✓ 500 g White Bread Flour
 - ✓ 500 g Cake Flour
- ✓ INTERVAL: Bi-Monthly
- ✓ # PARTICIPANTS: 6

SUNFLOWER

ANNUAL PRE-HARVEST GRADING RING TEST

- ✓ PRODUCT TYPE: 60 g Sunflower
- ✓ INTERVAL: Per Season
- ✓ # PARTICIPANTS: 11

Accreditation

Accreditation under the International Organization for Standardization (ISO/IEC) 17025 is maintained. SANAS (South African National Accreditation System) conducts surveillance audits within an 18-month cycle to confirm that SAGL is compliant with the requirements of this international standard applicable to testing laboratories. Accurate and reliable analytical results are assured through the maintenance of SAGL's accreditation status. The SANAS audit took place during June 2016, details are provided on page 16 of this report. SAGL's participation in a wide range of international proficiency schemes serves as ongoing proof of technical competence and is also a requirement to comply with ISO/IEC 17025.

Table 2: The comprehensive range of test methods on different matrices covered to confirm traceability to international standards across the entire range of analyses offered to the industry by SAGL. (* Not accredited method)

PROFICIENCY SERVICE PROVIDER	FREQUENCY OF PARTICIPATION - # OF SAMPLES PER YEAR	MATRIX	ANALYSIS	ACCREDITED
American Association of Cereal Chemists International (ACCI) United States of America	6	Wheat Flour	Moisture & Alveograph	✓
		Hard Wheat Flour	Moisture, Protein, Ash, Falling number and Diastatic activity*	✓
		Feed Samples	Moisture, Protein, Ash, Crude fat (EE) and Crude fibre	✓
		Different Grain Based Matrices	Moisture & Total dietary fibre	✓
		Hard Wheat Flour	Moisture & Farinograph	✓
		Wheat Flour	Moisture & Mixograph	✓
	Different Matrices	Moisture, Vitamins & Minerals	✓	
	12	Different Matrices	Moisture & Sugar* (Fructose, Glucose, Sucrose, Maltose and Lactose)	
Bureau Interprofessionnel der Etudes Analytiques (BIPEA) France	10	Wheat Flour (Different types)	Moisture, Protein, Falling Number, Ash, Damaged starch*, Gluten (Wet & Dry)*, Gluten index*, Alveograph	✓
		Wheat Flour (Different types)	Moisture and Farinograph	✓
		Different Matrices	Mycotoxins	✓
	5	Amino Acids (Animal feed)	Protein, Free and Protein bound amino acids	
The Food and Environmental Research Agency (FAPAS) United Kingdom	10	Various Mycotoxin Matrices	Mycotoxins	✓
	1	Milk Powder	Melamine	
	5	Bread Crumbs / Biscuits / Cereal / Soy bean meal / Poultry ration	Moisture, Ash, Nitrogen, Starch*, Total dietary fibre, Crude fat, Crude fibre* and Sodium	✓
	1	Milkshake powder	Sugar* (Fructose, Glucose, Sucrose, Maltose and Lactose)	✓
AgriLASA South Africa	12	Various Feed Samples	Moisture*, Protein, Ash, Crude fat, Crude fibre*, Dietary fibre, Starch* and Minerals	✓
CODA-CERVA (NRL Belgium)	2	Cereal flour	Mycotoxins	✓
Romer Labs Check-Sample-Survey	1	Maize	Deoxynivalenol	✓
Aflatoxin Proficiency Testing and Control in Africa, Asia and Americas (APTECA)	2	Maize meal	Aflatoxins B1, B2, G1, G2	✓

ACCREDITATION SURVEILLANCE AUDIT 2016

The scope of SAGL's accreditation is determined by the needs of the Industry. Over the years, this scope was expanded in line with changing legislation and other local and international requirements.

Technical Signatories create a solid foundation for growth in the organisation and results in an emphasis on technical skills development.

Currently, SAGL have 14 SANAS Approved Technical Signatories. The scope of accreditation covers 21 methods, representing 34 different parameters.



To comply with the requirements of ISO/IEC 17025, surveillance audits are conducted in a 18-month cycle to confirm compliance.

SANAS conducted the 18-month surveillance audit between 13 and 15 June 2016.

Included in the audit, was the assessment of four prospective Technical Signatories.

During the audit, four Technical and four System non-conformances were raised. These were successfully cleared within the prescribed timelines.

Maphela Ramare



- ✓ CONTINUATION OF ACCREDITATION WAS RECOMMENDED
- ✓ ALL FOUR TECHNICAL SIGNATORIES WERE APPROVED



Ben van der Linde



Mamsy Motlanthe

Marie Fourie



"What we see depends mainly on what we look for." ~ John Lubbock



ACCREDITATION CERTIFICATE - ISO 17025



CERTIFICATE OF ACCREDITATION

In terms of section 23(2) (b) of the Accreditation for Conformity Assessment, Calibration and Good Laboratory Practice Act, 2008 (Act 19 of 2008), read with sections 25(1), (2) and (3) of the said Act, I hereby certify that:-

SOUTHERN AFRICAN GRAIN LABORATORY NPC
Co. Reg. No.: 1997/018518/08

Facility Accreditation Number: T0116

is a South African National Accreditation System accredited Testing laboratory provided that all SANAS conditions and requirements are complied with

This certificate is valid as per the scope as stated in the accompanying schedule of accreditation Annexure "A", bearing the above accreditation number for

CHEMICAL AND PHYSICAL ANALYSIS

The facility is accredited in accordance with the recognised International Standard

ISO/IEC 17025:2005

The accreditation demonstrates technical competency for a defined scope and the operation of a laboratory quality management system

While this certificate remains valid, the Accredited Facility named above is authorised to use the relevant SANAS accreditation symbol to issue facility reports and/or certificates

M R Jordan
Chief Executive Officer
Effective Date: 01 November 2014
Certificate Expiry: 31 October 2019

ANNEXURE A

SCHEDULE OF ACCREDITATION

Facility Number: T0116

Permanent Address of Laboratory: Southern African Grain Laboratory (NPC) Grain Building 477 Whiteville Road The Willows 0040	Technical Signatories: Ms J Norjé (All) Ms M Fourie (In-House Method 012) Ms M Hammea (Chemical) Ms E Vorster (Rheological) Ms A de Jager (Nutrients & Contaminants) Ms A Saville (In-House Method 026) Ms M Henning (Chemical) Ms W Louw (In-House Methods 001, 002, 003, 010, and 028) Ms D Moleke (Rheological) Ms I Terblanche (Rheological) Ms H Meyer (Chemical, Nutrients & Contaminants) Ms J Kruger (Chemical, excluding In-House Method 012)	
Postal Address: Postnet Suite # 501 Private Bag X 1 The Willows 0041	Nominated Representative: Ms S du Preez Management Representative: Ms W Louw	
Tel: (012) 807-4019 Fax: (086) 216-7672 E-mail: info@saglab.co.za	Issue No.: 20 Date of Issue: 09 April 2014 Expiry Date: 31 October 2014	
Materials / Products Tested	Type of Tests / Properties Measured, Range of Measurement	Standard Specifications, Equipment / Technique Used
CHEMICAL		
Ground Barley	Mixture (Oven Method)	Analytical EBC Method 3.2, Latest Edition
Cereal and cereal products specifically wheat, rice, (hulled paddy), barley, millet, rye and oats as grains, semolina and flour	Mixture (Oven Method)	ICC Std No.110.1, Latest Edition
Flour, semolina, bread, all kind of grains and cereal products, and food products (except those that are sugar coated)	Mixture (Oven method)	AACCI 44-15.02, Latest Edition
All flours, cereal grains, oilseeds and animal feeds	Nitrogen and protein (Combustion method - Dumas)	AACCI 46-30.01, Latest Edition

Original Date of Accreditation: 01 November 1999

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Acting Field Manager

ANNEXURE A

Facility No.: T0116
Date of Issue: 09 April 2014
Expiry Date: 31 October 2014

Materials / Products Tested	Type of Tests / Properties Measured, Range of Measurement	Standard Specifications, Equipment / Technique Used
Food stuff	Dietary fibre (total)	In-House Method 012
Food stuff and feeds	Carbohydrates (by difference) (calculation) Energy value (calculation) Total digestible nutrition value (calculation)	SOP MIC 23
Food stuff and feeds	Determination of ash	In-House Method 011
Wheat kernels	Mixture (Oven method)	Government Gazette Wheat Grading Regulation, Latest Edition (72 hour, 109°C)
Flours of grains, e.g. barley, oats, triticale, maize, rye, sorghum and wheat; oilseeds like soybeans and sunflower, feeds and mixed feeds and foodstuffs	Crude Fat (Either extraction by Soxhlet)	In-House Method 024
Meal and flour of wheat, rye, barley, other grains, starch containing and malted products	Falling number	ICC No 107/1, Latest Edition
NUTRIENTS & CONTAMINANTS		
Vitamin fortified food and feed products and fortification mixes grain based	Vitamin A as all trans Retinol (Saponification) (HPLC)	In-House Method 001
Vitamin fortified food and feed products and fortification mixes grain based	Thiamine Mononitrate (HPLC) Riboflavin (HPLC) Nicotinamide (HPLC) Pyridoxine Hydrochloride (HPLC)	In-House Method 002
Vitamin fortified food and feed products and fortification mixes grain based	Folic Acid (HPLC)	In-House Method 003
Grain based food and feed products (fortified and unfortified) and fortification mixes	Total sodium (Na) Total iron (Fe) Total zinc (Zn)	In House Method 010

Original Date of Accreditation: 01 November 1999

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Acting Field Manager

ANNEXURE A

Facility No.: T0116
Date of Issue: 09 April 2014
Expiry Date: 31 October 2014

Materials / Products Tested	Type of Tests / Properties Measured, Range of Measurement	Standard Specifications, Equipment / Technique Used
Food and feed	Multi-Myco toxins: - Aflatoxin G ₁ , B ₁ , G ₂ , B ₂ and total - Deoxynivalenol (DON), 15-ADON - Fumonisin B ₁ , B ₂ , B ₃ - Ochratoxin A - T ₂ , HT-2 - Zearalenone	In-House Method 026
GRADING		
Maize	Defective kernels (white maize/ yellow maize)	Government Gazette Maize Regulation, Latest Edition
Cereal as grains (wheat, barley, rye and oats)	hectolitre mass (500g)	ISO 7971-3, Latest Edition
Wheat	Screenings	Government Gazette Wheat Grading Regulation, Latest Edition
RHEOLOGICAL		
Wheat flour	Alveograph (Rheological properties)	ICC No 121, Latest Edition
Flours	Fainograph (Rheological properties)	AACCI 54.02, Latest Edition (Rheological behaviour of Flour Fainograph: Constant Flour Weight procedure)
Hard, soft and durum wheat, (flour and whole wheat flour)	Micrograph (Rheological properties)	Industry Accepted Method 020 (based on AACCI 54-40.02, Latest Edition Micrograph Method)

Original Date of Accreditation: 01 November 1999

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ISSUED BY THE SOUTH AFRICAN NATIONAL ACCREDITATION SYSTEM

Acting Field Manager

"Life doesn't require that we be the best, only that we try our best." ~ Jackson Brown Jr.

ACCREDITATION CERTIFICATES & AWARDS

AFMA hereby certify that

Southern African Grain Laboratory NPC

complies with the following criteria of the AFMA Code of Conduct for the Manufacturing of Safe Compound Animal Feedstuffs

- All legal requirements in terms of Act 35 of 1984, Act 36 of 1947 and Act 101 of 1956 must be complied with.
- Animal Feed Manufacturers must meet the requirements of Good Manufacturing Practice (GMP) to ensure feed safety.
- Animal Feed Manufacturers must recognize the importance of a Food Safety Management System and adopt the relevant procedures.
- Technical animal feed recommendations and formulation must be carried out by qualified Animal Scientists that are registered with the South African Council for Natural Scientific Professions (Act 27 of 2003).
- Animal Feed Manufacturers must comply with the Basic Conditions of Employment Act.
- Animal Feed Manufacturers must promote the AgriBEE Act as laid down by the National Department of Trade and Industry.
- Animal Feed Manufacturers must comply with the Occupational Health and Safety Act.
- Animal Feed Manufacturers must comply with all relevant legal requirements so as to not bring the Industry, Association or its members into disrepute.
- Animal Feed Manufacturers' mills, must at a confirmed date be available for auditing for the conformance to the AFMA Code of Conduct by an accredited body which will be appointed by AFMA.
- Animal Feed Manufacturers will comply with the MAIN OBJECT of AFMA as stipulated in its Memorandum of Association – "The main object of the Company is to promote the interests of its members and those of the animal feeds industry and the community insofar as they relate to each other"

AFMA Chairperson
 AFMA Executive Director
 June 2015 - 2017 Date

RECOGNITION OF ANALYTICAL PERFORMANCE

Analysis of Hard Wheat Flour

Southern African Grain Laboratory
Pretoria, SOUTH AFRICA

Achieved Outstanding Accuracy and Precision for the year 2015 in check samples including the following analyses:
Moisture, Protein, Ash, Falling Number

Executive Vice President
 President

RECOGNITION OF ANALYTICAL PERFORMANCE

Analysis of Mixograph

Southern African Grain Laboratory
Pretoria, SOUTH AFRICA

Achieved Satisfactory Accuracy and Precision for the year 2015 in check samples including the following analyses:
Moisture, Peak time, Peak ht, 8 min ht, Slope

Executive Vice President
 President

RECOGNITION OF ANALYTICAL PERFORMANCE

Analysis of Feed

Southern African Grain Laboratory
Pretoria, SOUTH AFRICA

Achieved Outstanding Accuracy and Precision for the year 2015 in check samples including the following analyses:
Moisture, Protein, Ash, Fat (EE), Crude Fiber, Calcium

Executive Vice President
 President

CERTIFICATE OF PARTICIPATION

This certificate is awarded to:

SOUTHERN AFRICAN GRAIN LABORATORY NPC
THE WILLOWS – PRETORIA – SOUTH AFRICA

for its participation in BIPEA's interlaboratory comparisons for the 2015-2016 annual series.

June 30, 2016 - Paris - France

BIPEA Member
 BIPEA Director
 Certificate n° 15-16 / 11119

Financial Position

The annual financial statements were prepared on the basis of accounting policies applicable to a going concern. This basis presumes that funds will be available to finance future operations and that the realisation of assets and the settlement of liabilities, contingent obligations and commitments will occur in the ordinary course of business. The Directors believe that the company has adequate financial resources to continue operations for the foreseeable future and accordingly the financial statements have been prepared on a going concern basis. The Independent Auditors' Report indicates no material inconsistencies between the Directors' Report and the audited financial statements. Figures 6, 7 and 8 provides a summary of the financial position of SAGL.

Financial details over the last six years

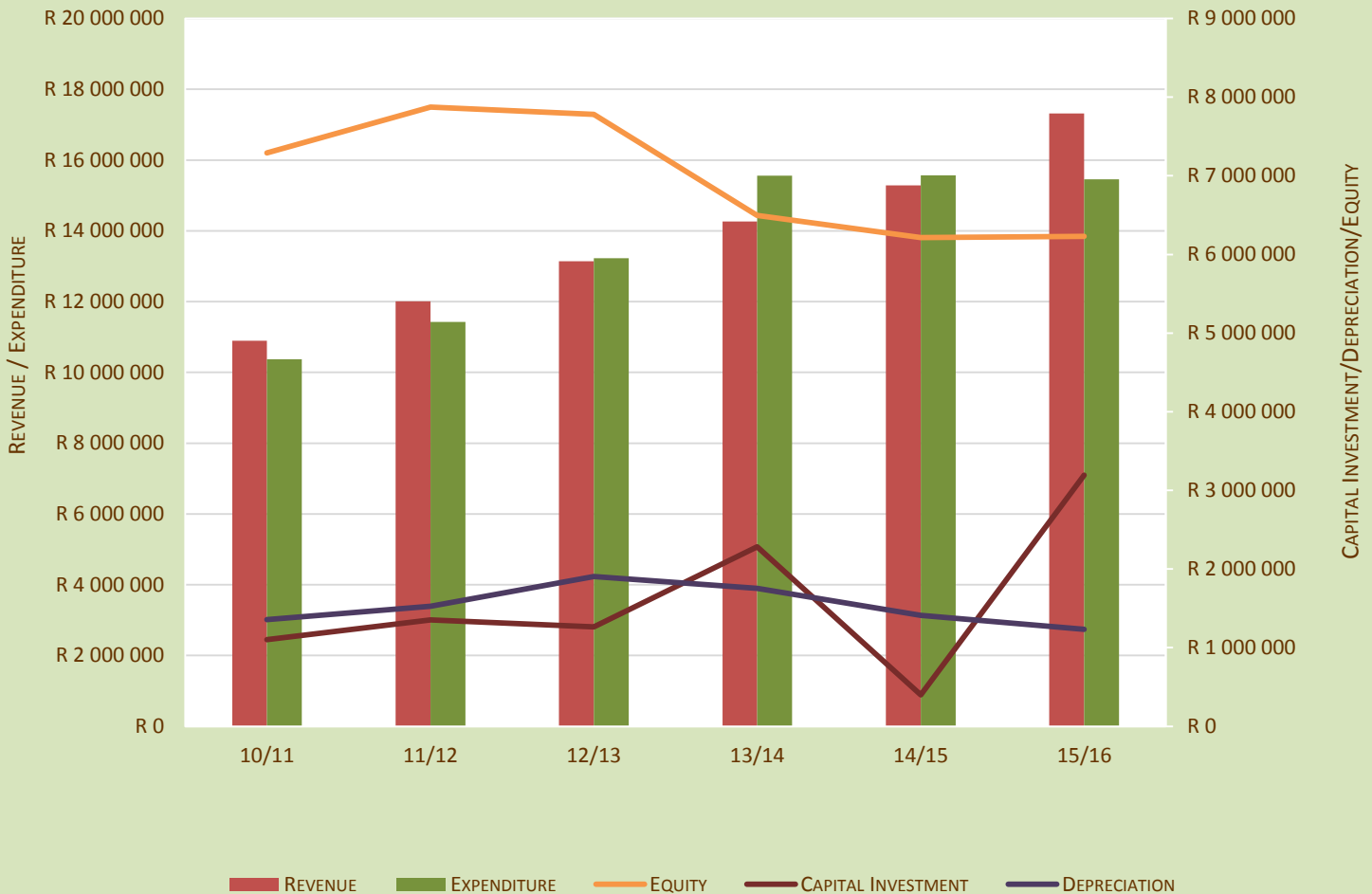


Figure 5: Financial position of the SAGL since the 2010/2011 financial year.

Learn to think BIG but start small. All big projects eventually started with a single step ~ Petronela Zainudin

Financial Position

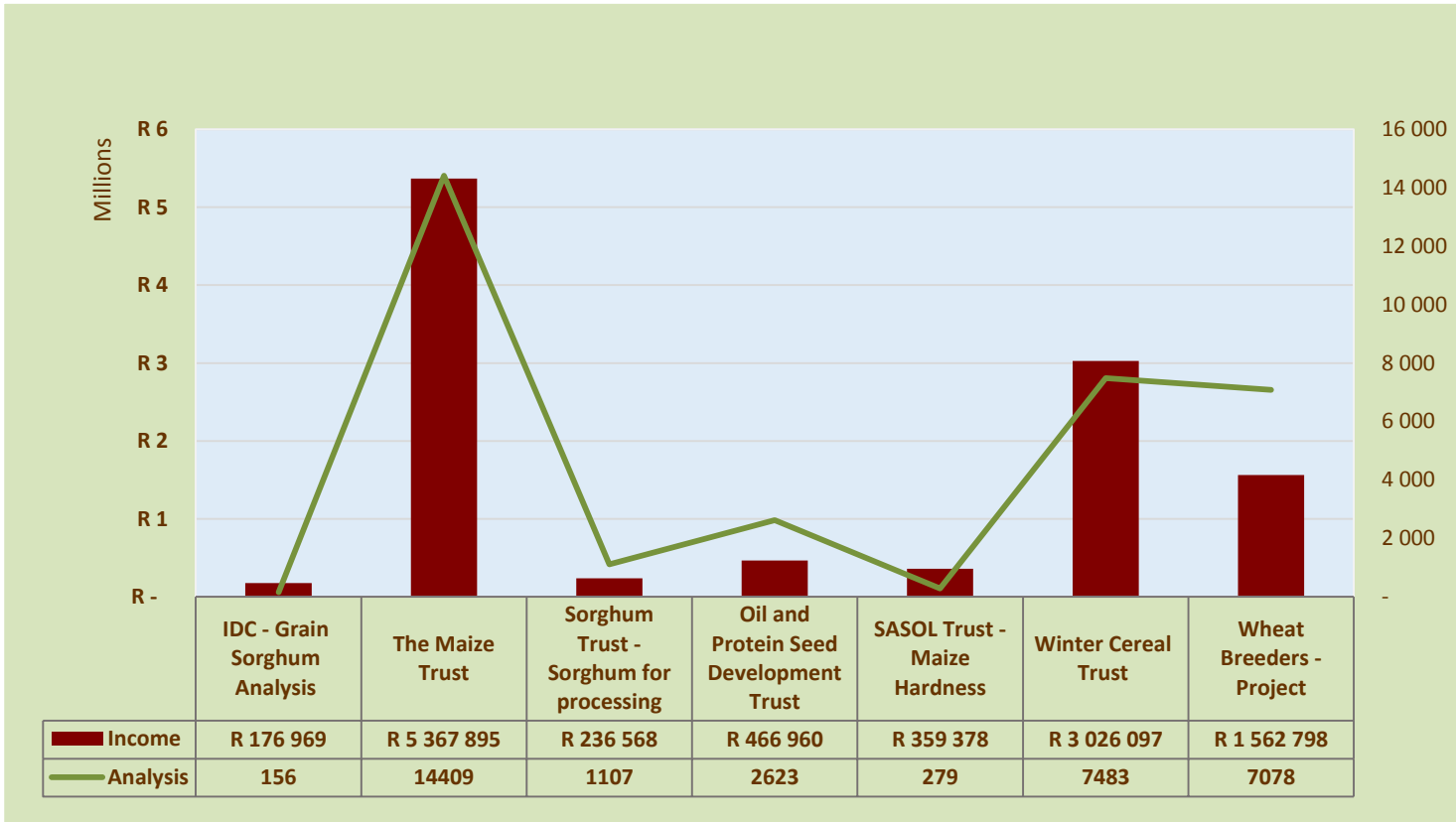


Figure 7: The number of analyses and revenue generated on specific projects.

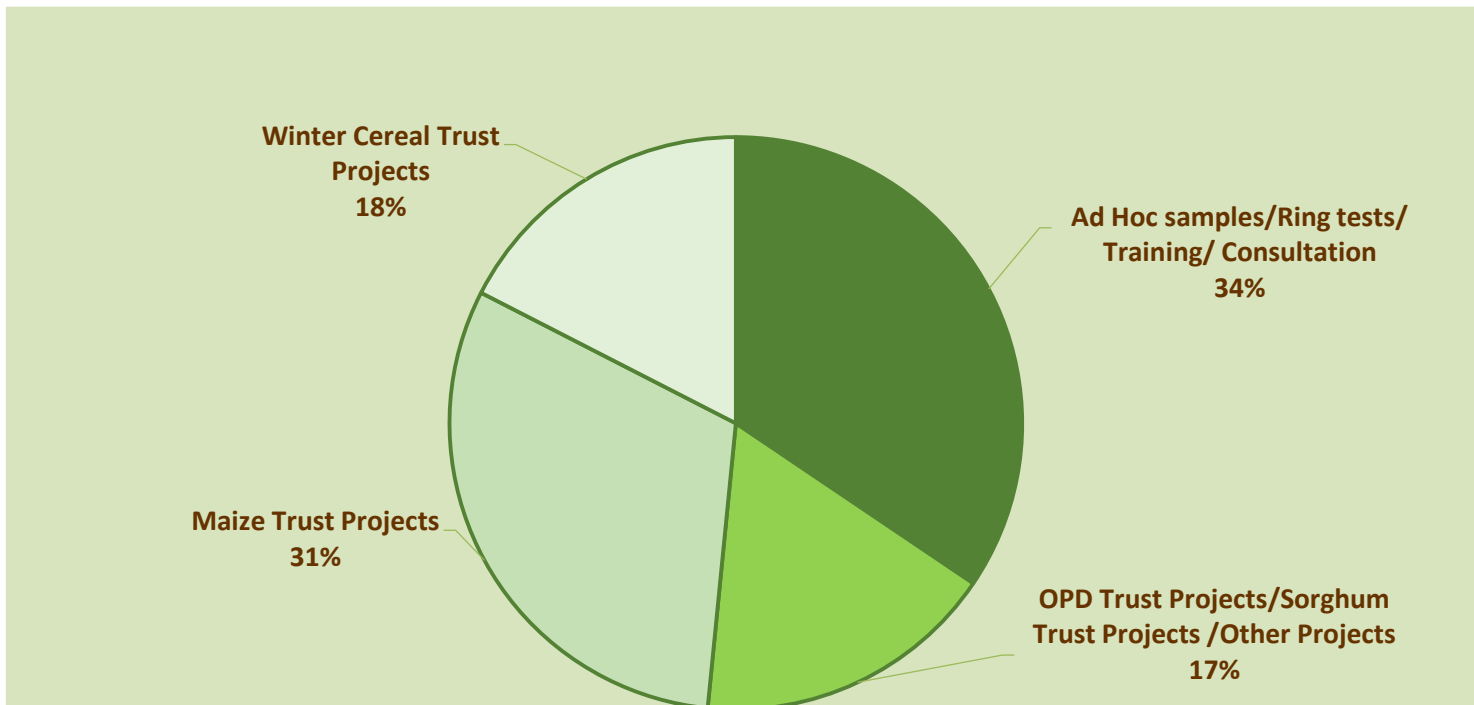


Figure 8: The different revenue sources.

Conclusion

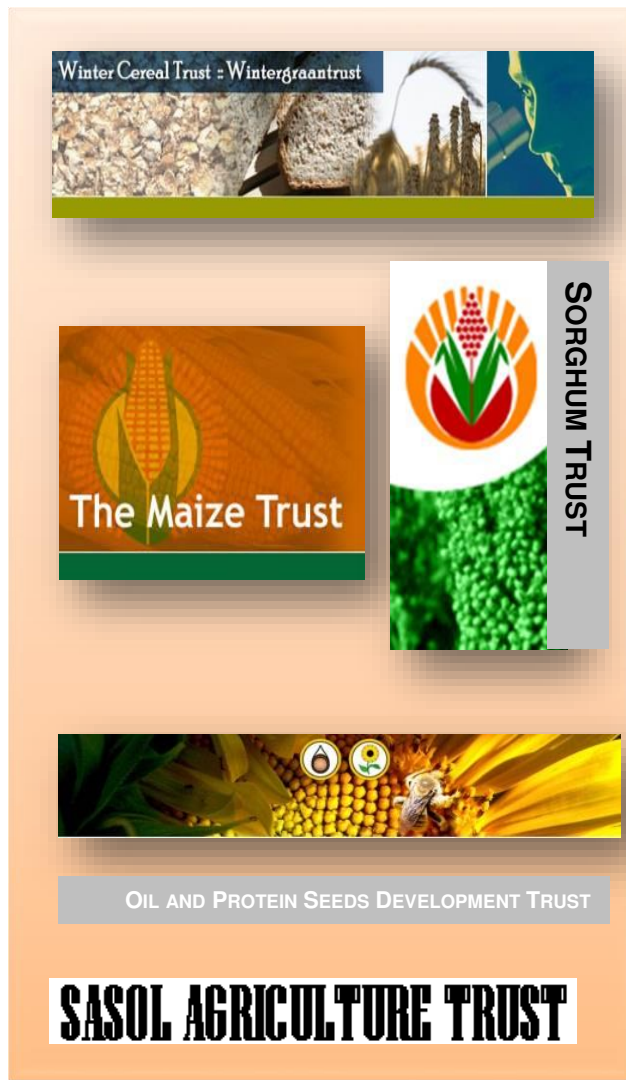
By ensuring an operational structure and service profile aligned with the changing needs of the South African Grain and Oilseed Industry, SAGL once again confirmed its relevance and position as a reference laboratory of choice. SAGL remains focused on supporting the Grain and Oilseed Industry to ensure it is internationally competitive.

Acknowledgements

I would like to thank the Board of Directors for their support and commitment and, in particular, the Executive Committee, De Wet Boshoff and Mariana Purnell. I also would like to extend a special word of thanks to the SAGL management team for their specific inputs.

The dedication and level of excellence delivered by the Board, management team and the personnel of the SAGL made a significant contribution to the SAGL achieving its goals during the 2015/2016 financial year.

The results of everybody's contribution and hard work are reflected in this strong enterprise with real benefits to the Grain and Oilseed Industry in Southern Africa.



Winter Cereal Trust - Wintergraantrust

The Maize Trust

SORGHUM TRUST

OIL AND PROTEIN SEEDS DEVELOPMENT TRUST

SASOL AGRICULTURE TRUST

MR. BOIKANYO MOKGATLE
CHAIRPERSON 2015/2016

"Isn't it nice to think that tomorrow is a new day with no mistakes in it yet?" ~ L M Montgomery

Quality is our Passion





The Southern African Grain Laboratory NPC

Quality is our passion

SAGL is an independent grain and oilseed testing laboratory with customers throughout Southern Africa. We strive to ensure the satisfaction of our customers by delivering accurate and reliable test results upon which informed decisions can be based. SAGL provides an excellent service on grain, oilseeds and products thereof (including foods, feeds and feedstuffs) at market related prices. We specialise in a wide range of analyses, including grading, milling, physical, chemical, rheological, baking and mycotoxin tests as well as macro- and micro-nutrients.

The laboratory implements ISO 17025 accredited test methods and operates within a comprehensive quality system. Participation in several international proficiency schemes demonstrate our technical competency, international comparability and traceability to international standards.

Annual crop quality surveys on wheat, maize, soybeans and sunflower funded by the Winter Cereal Trust, Maize Trust and Oil and Protein Seed Development Trust, generate crop quality data that reveals general tendencies over production regions and seasons. In addition to quality information, the Crop Estimates Committee's production figures related to hectares planted, tons produced and yields obtained as well as supply and demand information from SAGIS (South African Grain Information Service) are also included. Reports can be requested from SAGL or can be downloaded from the SAGL website in PDF format.

Please visit our website for information pertaining to SAGL ring tests and laboratory training courses that will add value to your own internal quality control system.



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