ANNUAL REPORT

APRIL 2011 - MARCH 2012

SAICE Professional Development & Projects NPC

(a non-profit company)

Trading as

Civils Masakheni



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EXECUTIVE SUMMARY

SAICE Professional Development and Projects (SAICE-PDP) was established by SAICE in 2004 to implement SAICE Outreach and Capacity Building initiatives and activities that require external funding. Projects implemented by SAICE-PDP focus on developing civil engineering capacity outside the needs of SAICE membership, in South Africa and further afield. SAICE-PDP also supports service delivery and creates civil society awareness through education, training and orientation projects relating to developing and maintaining infrastructure.

Activities and projects

The Gauteng Municipal Support project transferred from the Development Bank of Southern Africa (DBSA) to the Department of Cooperative Governance (DCoG) in preparation for setting up the Municipal Infrastructure Support Agency (MISA). The DBSA Young Professionals (YP) Programme came to an end on 31 July 2011. After three years of being mentored and trained in local government, it was gratifying to have achieved the registration of eighteen YPs in the allotted time and to realise that some twenty more are likely to be ready for registration next year.

Demand continued for courses offered by the Candidate Academy. During the year a Basic Sewer Design course was added. Of importance, was the introduction, of the Road to Registration for Mature Candidates which addresses the needs of experienced practitioners who should have long since registered but have never completed their ECSA forms. Courses aimed at graduates, mentors, supervisors and companies on the registration process were attended by some 880 delegates and a further 289 attended technical courses covering contract administration, pavement rehabilitation, pipe network design and sewer design. Many in-house courses were commissioned, indicating the commitment of companies to develop their young graduates.

SAICE-PDP was awarded the contracts to manage the Local Government 2011/12 Engineering BTech Bursary Scheme and the Local Government 2011/2012 Technical Intern Programme, funded by the Local Government Sector Education Training Authority (LGSETA).

Apart from company projects, SAICE-PDP was involved in offering advisory services, wherever possible, to assist a range of organisations with skills development, education and training. To this end we attended meetings, delivered lectures and presentations, offered advice, developed position papers, participated in, and in some instances, chaired workshops for, among others, the following institutions:

- Construction Education and Training Authority (CETA)
- Consulting Engineers South Africa (CESA)
 - Annual Conferences
 - School of Consulting Engineers
 - Human Resources Forum
- Department of Cooperative Governance (DCoG)

- o Local Government Learning Academy (LOGOLA)
- Municipal Infrastructure Support Agency (MISA)
- Department of Higher Education and Training
- Department of Roads and Public Works, Eastern Cape
- Department of Roads and Transport, Gauteng Province
- Department of Roads, KwaZulu Natal
- Department of Roads and Public Works, Western Cape
 - o Masakh' iSizwe
 - o Proftech
- Department of Water Affairs
- Engineering Council of South Africa (ECSA)
 - Committee on Engineering Capacity Building
 - o Council
 - o Central Registration Committee
 - o Joint Implementation Committee
 - o Registration Committee Professional Engineering Technologists
 - Strategic Advisory Committee Working Group 1 Candidacy Phase
- ESKOM
- Gauteng Department of Finance
- Gauteng Department of Infrastructure and Development (GDID)
- Gauteng Department of Local Government and Housing (GDLG&H)
- Human Resources Development Council of South Africa (HRDCSA)
- Manufacturing, Engineering and Related Services Education and Training Authority (merSETA)
- National Department of Transport
- Quality Council for Trades & Occupations (QCTO)
- South African National Roads Agency Limited (SANRAL)

Prospects

Of concern is the fact that we once again enter the new financial year with uncertainty, as all the major projects in which SAICE-PDP has been involved in the past have come to an end. On the positive side, we have received an appointment from the Department of Roads and Public Works in the Eastern Cape and several provinces have expressed the need for support with professionalisation, in response to the occupation specific dispensation offered by the Department of Public Service and Administration for engineering and other professional staff.

In memoriam

Sadly, during the 2011/2012 financial year we lost one of our senior engineers, Arie de Kruijff who was deployed at Ekurhuleni Metropolitan Municipality until June 2011. A true servant leader, his passion for making a difference contributed greatly to addressing the development of Community Centres and understanding the dolomite challenges in Ekurhuleni. Our condolences were sent to his wife, Tineke

and family and several senior engineers attended his funeral, which was a wonderful celebration of his life.

A word of appreciation

I would like to express my thanks to the SAICE Professional Development and Projects Directors and Members, SAICE personnel, SAICE-PDP engineers, graduates, interns, students, colleagues and staff of SAICE-PDP for their enthusiasm and continued support. And finally, a big thank you to all our funders for entrusting their skills development initiatives to the company.

ALLYSON LAWLESS

Managing Director

PROJECT DETAILS

Gauteng Municipal Support



Figure 1 : SAICE-PDP Farewell and Awards

Figure 2 : Arie de Kruijff receiving his Certificate of Recognition from Manglin Pillay

The Gauteng Municipal Support initiative continued. During the year, a total of 27 senior engineers, three specialists, seven graduates, and 39 students were deployed in 11 of the 14 Gauteng municipalities.

Sadly, although the SAICE-PDP team has achieved amazing results over the six years since the inception of Gauteng support, it was necessary to transfer our senior engineers directly to the employ of the Department of Cooperative Governance with effect from 1 October 2011, and to say good-bye to our graduates and students, due to the withdrawal of funding for external service providers.

A farewell was hosted to thank all the senior engineers for their services to SAICE-PDP and Certificates of Recognition were awarded. Commencing 1 April 2012, SAICE-PDP will have no further involvement in Gauteng Municipal support.

Although for the greater part of the year only eight senior engineers were deployed full-time, and bureaucracy, staff shortages, budgets and other bottlenecks tended to inhibit their progress, the project nevertheless made considerable progress.

Well over R500m worth of projects were planned by the senior engineers and almost R300m was spent. Whilst in the past, water, sanitation and road development projects tended to dominate spending, it can be seen in Figure on the following page that much emphasis was been placed on housing, socioeconomic development and community services in the 2011/2012 financial year. Unique activities which deserve a mention in the 2011/12 financial year are as follows:

City of Johannesburg

SAICE-PDP were requested to headhunt engineers who were experts in motorway structures and management, address the backlog in maintenance and develop skills. A manual on motorway maintenance, based on the evidence of faults that could be found, was drawn up to train staff. The Bridge Management System (BMS) was re-instituted and information from the 2005 BMS was used to

identify the work that needed to be done by a consulting team, which SAICE-PDP appointed through the offices of the JRA.

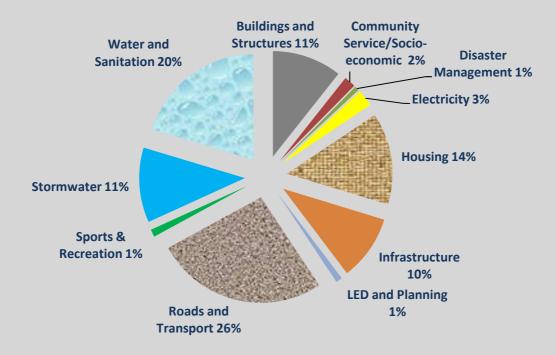


Figure 3: Percentage expenditure per discipline in Gauteng in the 2011/12 financial year

A total of 26 Standard Operating Procedures (SOPs) were re-written and of the 26, training material was developed for 12 SOPs. Training was provided to operational employees at various depots and staff who have been exposed to the training have become much more aware and appreciative of the importance of their specific role in the bigger picture.

SAICE-PDP maintained contact with the City Manager's Office with a view to offering support for the introduction of a new senior management structure which will enhance engineering to improve service delivery. The first and second reporting levels in the CoJ were revamped with the introduction of a Chief Operating Officer to assist the City Manager, removing normal operational functions from his agenda. SAICE-PDP further delivered a proposal to assist the Johannesburg Roads Agency to re-engineer all aspects of its business.

Ekurhuleni Metropolitan Municipality

The highlight of the year was delivering the Road to Registration workshop to a total of 57 Ekurhuleni engineering staff and project managers, many of whom emerged feeling confident that they were ready for registration. Training plans will be developed for those who require further experience in the next financial year.

City of Tshwane

Supporting the development of in-house staff was also a highlight in the City of Tswhane (COT). Workshops were held to address the needs of technical staff in the Roads, Water and Wastewater Departments. Twenty four graduates participated, and their efforts to apply for professional registration with ECSA have been supported on a one-on-one basis. Good progress was made and support will continue in the new financial year.

Assisting Tshwane Transition and Merger

When the Metsweding District Municipality was disestablished on 18 May 2011, the CoT became the successor-in-law. During the run-up to this merger, SAICE-PDP assisted the Metsweding DM with service delivery, development planning and approvals; and worked with the CoT to integrate structures, systems and processes into their existing systems. Considerable support was given to the Roads and Water functions in Nokeng in cooperation with the Administrator, who was appointed to stabilize the municipality prior to the merger.

Randfontein

Significant progress was made in addressing many of the strategic, management and operational constraints of the municipality. The continuity of this support is essential to enable Randfontein to



Figure 4: Merafong Housing Project



Figure 5: Students trained by Peet Potgieter

function at its best as a local municipality, that can be brought into Vision 2016, as a vibrant and going concern.

Merafong

Some 30 capital projects were managed and funding was sourced through the Department of Local Government and Housing, the West Rand District Municipality, MIG and the Department of Sports, Recreation, Arts and Culture and Heritage. One of the largest housing developments, in Khutsong, is progressing according to schedule and services are being planned for the next phase.

Training

Students, graduates and in-house staff were trained throughout the province. In-house staff were largely assisted with registration whilst students were exposed to the range of activities necessary for them to graduate. Electrical, civil and town planning

graduates were also trained. Sadly, most of the electrical graduates were snapped up by ESKOM, rather than being retained in local government.

Specialist reports

A number of specialist reports were prepared or updated during the year, collating information gathered by deployees across the province. These included the following:

Master Planning Guideline

The Master Planning Guideline was updated to include a number of new national target dates and documents.

Competence profiles

Competence profile CDs and guidelines were supplied to numerous municipalities to assist them in their professionalisation efforts.

Asset Management Assessment

Having realised the poor state of Infrastructure Asset Management (IAM) in Gauteng municipalities, SAICE-PDP worked with the Gauteng Dept of Finance to interview all local municipalities and several IAM consultants who were active in developing IAMPs nationally, as well as National Treasury. It was established that IAM is so poorly understood that municipalities have only focused on GRAP 17 compliance. In researching municipal spending it was found that some municipalities had no budget for maintenance and those who had some budget only responded to failures. Only two municipalities had fully compliant IAMPs, and none were using them as management tools. Recommendations were as follows:

- A common valuation of municipal services must be established so that municipalities can be compared
- A standard Scope of Work needs to be written for the appointment of consultants to ensure that all obtain cost effective and compliant GRAP 17 asset registers
- SAICE PROFESSIONAL DEVELOPMENT & PROJECTS

 REPORT ON INFRASTRUCTURE ASSET
 MANAGEMENT

 GAUTENG MUNICIPALITIES

 MAY 2011

 Figure 6: Cover of the Infrastructure

Asset Management Report

- All municipalities must follow the National Treasury Guidelines and CoGTA (previously dplg) Asset
 Management guidelines, and establish a dedicated Asset Management team
- Technical or Infrastructure Departments in municipalities must be involved in the preparation and
 maintenance of GRAP 17 compliant asset registers. (To date this has largely been handled by municipal
 finance departments who have not collected the amount of detail necessary for an Infrastructure Asset
 Management System).

Housing Assessments for the Implementation of the "Breaking New Ground" strategy



Figure 7: Housing Assessment – Breaking New Ground

In 2010, the National Department Human Settlements and the Gauteng Provincial Department of Housing and Local Government conducted assessments of Gauteng Metros. The purpose of the assessments was to determine capacity, and compliance to deliver on the Breaking New Ground in Housing delivery (BNG) initiative, at Level 2. The assessments were intended to provide recommendations to the National Minister, and the MEC, regarding the preparedness and capacity of the Metros, to meet the requirements of the BNG.

SAICE-PDP was requested by to review the assessments and determine the skills/capacity requirements, for the maintenance of Level 2 accreditation, and to determine the capacity requirement for Level 3 accreditation.

A SAICE-PDP senior engineer conducted the assessments in Ekurhuleni, Tshwane and Johannesburg. Structures and capacity were found to be inadequate, and recommendations with regard to developing scarce skills strategies, planning and budgeting for capacity building and professionalisation were developed.

Establishment of MISA

National Government initiated the Municipal Infrastructure Support Agency (MISA), during the latter part of 2011. The initiative was intended to provide a single window of support for local government, to develop and implement the Local Government Turn-Around Strategies (LGTAS).

SAICE-PDP had assisted DCoG, with the conceptualisation of the Agency since inception, and was tasked with developing a support model, based on the experience gained over the past six years, lessons learnt, and current and outstanding support initiatives.

Professionalisation

Since the establishment of the Candidate Academy the professionalisation of staff in provincial and local government has gained momentum. SAICE-PDP has utilised the impending MFMA and PFMA legislation, which requires all senior management to be registered or attain specific qualifications by January 2013, to drive the registration agenda. We have successfully intervened and provided our services in most Gauteng municipalities.

We have been able to establish dedicated programmes in Tshwane, Emfuleni and Lesedi municipalities for 53 mature and experienced candidates.

Artisan training in Gauteng

The Artisan Programme which commenced in October 2009 continued in the 2011/12 financial year. The programme was designed to appoint 96 unemployed N4, N5 or N6 learners to attend workshop training and then complete apprenticeships in local government, working with experienced artisans to learn the trade. Institutional training commenced at municipalities in June 2010. The project is being managed by the Department of Local Government and Housing, but SAICE-PDP has continued to offer direction and run the payroll function. During the year, some 38 apprentices passed their trade tests.

Figure 8 : Western Cape mentor – Dave Lyddell with his YP Phemelo Majeni

The Development Bank of Southern Africa's Young Professionals Programme

The DBSA YP programme terminated on 31 July 2011. Against all odds, 28 applications were submitted to ECSA and 12 applications were submitted to the South African Council of Planners (SACPLAN). This would not have been achievable without the commitment of the mentors to assist the YPs with compiling their applications and ensuring the requirements of the respective Professional Bodies were met. Eight town planning and ten civil engineering YPs were registered within the three year period, beating national averages in terms of registration. Some twenty or more will be ready for registration next year.



Figure 9: Mr P Ndlovu (Left) and Mr S Dlamini (Middle) registered as Professional Engineering Technicians, Mr Ndlovu also graduated with BTech: Civil Engineering

It was gratifying to realise, when attending the graduation ceremony on 31 March 2012, that a large proportion of the YPs have been offered permanent posts in local government.

The Local Government Sector Education Training Authority BTech Bursary Scheme

Twenty-two students were awarded bursaries by the LGSETA in the 2011/2012 financial year. The majority of students who have been awarded bursaries have been able to commence their studies at various Universities of



Figure 10: Graduation of Student



Figure 11: G Sebelebele graduated after successfully completing her internship



Figure 12 : Road to Registration for Mature Candidates



Figure 13: Road to Registration for Candidate

Technology. Philani Ndlovu, Zimkhitha Makhonza, Larry Cronje, Andre Koopman, Lucas Sekhoto, Sifiso Nkonyane and Tobeka Zondi graduated during the financial year.

Local Government Sector Education Training Authority Internship Programme

Forty four interns successfully completed their experiential training for 2011/2012, 43% of whom were trained in the City of Tshwane.

Attempts to place further interns have been unsuccessful due to the withdrawal of the SAICE-PDP seniors from municipalities, as few municipalities have capacity to provide the necessary support and guidance towards the completion of experiential training.

The Candidate Academy

The Candidate Academy was conceived to work with young graduates in their early employment years to turn their theoretical training into the practical skills that are so sorely needed by South Africa's modern economy. The initiative involves SAICE-PDP, the SAICE Education and Training Department and the training initiative of Consulting Engineers South Africa (CESA) known as the School of Consulting Engineers.

During the 2011/12 financial year a total of 1169 delegates attended the range of courses listed below:

- Pavement Rehabilitation and Maintenance
- Introduction to Sewer Design
- Introduction to Pressure Pipeline Design
- Contract Administration and Quality Control
- The Road to Registration for Candidates
- The Road to Registration for Mature Candidates
- The Road to Registration for Supervisors, Mentors and HR Managers

This brings the total number trained by the Candidate Academy to 1951 since its inception in April 2010. The most substantial in-house training appointment was for

the KZN Department of Transport where 147 were trained in Ladysmith, Empangeni, Pietermaritzburg and Durban. Training for ESKOM was also extensive - courses were offered in Midrand and two courses were offered on site at Medupi.

Eastern Cape Professionalisation Programme

The Eastern Cape Department of Roads and Public Works has appointed SAICE-PDP to initiate and implement a professional development programme, commencing from 1 April 2012. The purpose of the programme is to:

- Develop technical graduates to a level where they can become registered professionals
- Manage the pre-graduation experiential training of student candidates
- Design and initiate continuous professional development (CPD) for registered staff
- Evaluate and develop standard operating procedures
- Review and evaluate the organisational structure
- Refine professional post portfolios and the associated competency profiles

The Water Sector Skills Gap Project

SAICE-PDP was invited to serve on the Reference Group and the Steering Committee of the above project. The Department of Water Affairs (DWA) acknowledges the importance of skills and human resource capacity shortages within the Water Sector. Institutions within the country frequently report a desperate need for skilled and competent human resources in order to sustain their businesses and provide world class customer services.

This project is aimed at developing an integrated water sector skills intervention map, based on the findings of a quantitative and qualitative sector wide skills audit. It will determine the scarce, critical and priority skills gaps for the different skills sets and skills areas of the water sector and prioritise them into immediate, medium to long-term priorities.

Masakh' iSizwe Advisory Board

Allyson Lawless and Dave Lyddell continued to offer support to the Masakh' iSizwe Advisory Board in terms of workplace training and links with local government in the Western Cape. The Masakh' iSizwe Centre of Excellence is a capacity-building initiative of the MEC of the Western Cape Department of Transport and Public Works.

Candidate Phase Strategic Advisory Committee

ECSA has embarked on updating the registration process to align better with international best practices and harmonise requirements across the three levels of registration (engineers, technologists and technicians). Part of the re-development of guidelines and procedures includes the need to develop guidelines for effective workplace training of graduates towards registration. It was decided that a subcommittee of ECSA's Strategic Advisory Committee should be set up to focus on the Candidate Phase.

Allyson Lawless was appointed to chair this committee and has worked with the Quality Council for Trades and Occupations (QCTO) to determine the viability of writing up the training guidelines as a curriculum and having the training phase registered as a qualification. The GIZ funded the researched phase which showed that the ECSA process lends itself to being converted into a curriculum. It is expected that qualifications will be developed and registered in the next financial year.

SAICE Education and Training Department

The requirement for CPD has been in place for almost ten years. Many organisations offer CPD accredited courses to allow registered professionals to earn points in order to retain their registration. It has been recognised that few new courses have been developed since inception of CPD and there is a need for greater variety to address the needs of those in their second CPD registration phase. The Candidate Academy staff took it upon themselves to research all courses available in the market, to determine gaps for both CPD and to expand the range of courses for the Candidate Academy to offer. Armed with the research, Allyson Lawless engaged with all SAICE Divisions to explore the possibility of them developing courses to offer through SAICE E&T Department. Several divisions have expressed an interest in working with SAICE on this project and it is expected that many more courses will be available towards the end of 2012.

100 x 100

The 100 x 100 project continued during the period under review. The initiative commenced in the SAICE centenary year, 2003, when Dudu Mkhize committed to sourcing 100 high potential rural students to study for engineering degrees in celebration of the centenary. The project has been rebranded as South African Young Engineering Professionals (SAYEP) and addresses all engineering disciplines. SAICE-PDP through interaction with donors was able to raise in excess of R 100 000 to support this project during the 2011/12 financial year.

GOVERNANCE

Appointments

Mr Johan Malherbe retired as a Director in August 2011, SAICE-PDP would like to thank Johan for his commitment and contribution during his term.

We were fortunate to have Mr Seetella Makhetha, Mr Stanford Mkhacane and Mr Errol Kerst who volunteered themselves to be appointed as Members in May 2011, August 2011 and March 2012 respectively and we look forward to their valuable input and the contribution of their expertise.

Board and Members meetings

The Board met on 03 August and 22 November 2011 under the chairmanship of Mr Gary Drummond and Members meetings were held on 03 August 2011 and 27 March 2012.

Directors and Members

Directors and Members who were in place as at 31 March 2012 are listed in the table below.

DIRECTORS

Gary Drummond (Chair)
Allyson Lawless
Manglin Pillay
Ali Naidu
Neil Macleod

MEMBERS

Danai Magugumela Seetella Makhetha Martin van Veelen Mehboob Babamia Sam Amod Simon Mqamelo Stanford Mkhacane Errol Kerst