



*SAICE president for 2006, Sam Amod, and his wife Lekha, with president for 2007, Neil Macleod and his wife Glenda.*

# People More Valuable than Technology – SAICE President

***Newly inaugurated president of the South African Institution of Civil Engineering (SAICE), Neil Macleod, has urged professional engineers to engage more closely with the communities they work in so as to ensure a better understanding and value of the profession. Lani van Vuuren reports.***

Other than doctors, lawyers and accountants, who deal directly with clients, engineering professionals' work is done in a less direct way, with only the products of their work being evident and not their role. "This lack of a direct link between the work of a civil engineer and his 'products' is a limiting factor in building the status of the civil engineering professional," noted Macleod during his inaugural address.

To compound the problem, the work of civil engineering professionals is generally well publicised in the case of failures. The general public takes for granted the fact that water comes out of their taps at a relatively constant pressure and is able to be drunk directly from the tap. Toilets are flushed with no thought for the processes

needed to transport this waste and treat and dispose of it safely. "As engineers we tend to assume that the public knows how these things work, and does not need to have them explained," said Macleod.

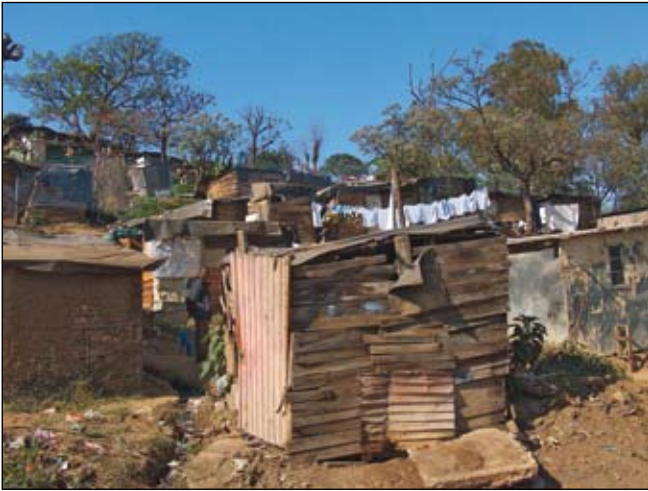
"There is a clear need for SAICE to communicate more clearly the role that civil engineers play in society and the fact that engineering is not 'obvious' or 'easy' and requires years of training and experience for one to become proficient," he continued.

"There is also a need to ensure that the quality of civil engineering work is of the highest quality and integrity and that this work is undertaken by competent persons."

According to Macleod, this improved communication would result in more

students choosing civil engineering as a career, as well as lead to a better understanding of the value of the civil engineering profession to society. Quoting his father, Don Macleod, who was president of SAICE in 1987, he said: "We should never see the fruits of technology as being of greater importance than people. Our respect for the dignity and immeasurable value of the human being should always be upheld."

All indications are that the civil engineering sector stands at the beginning of a period of significant increase in activity which will be equal to, or even exceed, the level of investment in civil engineering projects last seen in the late 1970s and early 1980s. Cabinet has recognised that, for economic growth to achieve levels



SAICE president Neil Macleod has urged civil engineers to engage more with the communities they serve.


needed to halve the levels of poverty and unemployment, the growth rate as measured by the increase in gross domestic product needs to be increased. In addition, the need to invest in new infrastructure and to adequately maintain existing infrastructure is emphasised in the Accelerated and Shared Growth Initiative in South Africa strategy document.

**“We should never see the fruits of technology as being of greater importance than people. Our respect for the dignity and immeasurable value of the human being should always be upheld.”**

Municipalities have the constitutional obligation to ensure the provision of infrastructure services to their communities. However, as Macleod pointed out, to meet community expectations in this regard was proving to be fraught with difficulties. “The shortage of engineering staff is a limitation on the sector’s ability to deliver. There are also valid concerns about the market’s ability to meet the demand for material resources

– plant and equipment, reinforcing and structural steel, cement, piping, electrical equipment and timber – at affordable prices.”

Contrary to belief, funding is not a constraint to growth at present, but rather the ability to access the funding that is available and spend it efficiently and effectively on projects that are socially, environmentally and financially sustainable. This is influenced by, among others, the shortage of engineering staff in the municipal sector, coupled with the small number of graduates that are being trained and mentored in municipalities.

“Our profession stands at the threshold of a period of unprecedented opportunity in South Africa, and we have the ability to meet the technical challenges that will be presented,” said Macleod. “However, we need to make a concerted effort to move closer to the general public so that the role of the civil engineering professional is valued and understood. To do so will require us all to relate to people with the same passion as we relate to technology.” 

**MORE ABOUT NEIL MACLEOD**



Born and educated in Durban, Neil graduated in 1972 with a B.Sc in Civil Engineering. He obtained an MBA in 1999 and is currently completing his PhD on the sustainable provision of water services to poor communities.

He has 30 years’ experience in the water and sanitation sector, and has since 1992 been the head of Water and Sanitation at the eThekweni Municipality where he manages an organisation with over 2 500 staff members and an annual turnover in excess of R2-billion providing services to the Durban metropolitan region.

His fields of expertise include water supply (conservation, demand management, treatment and distribution), sanitation, sewage collection and treatment as well as solid waste management, tariff design, and public/private partnerships.

Neil serves on the boards of the Municipal Infrastructure Investment Unit, and Johannesburg Water. He also chairs Building Partners for Development in Water and Sanitation.

**Table showing grant funding to municipalities**

YEAR	05/06	06/07	07/08	08/09
MIG (capital) funding	5,44 bn	6,26 bn	7,14 bn	8,05 bn
ES (operating) funding	17,16 bn	18,05 bn	20,08 bn	22,77 bn