



## NUUSBRIEF | NEWS LETTER

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## Landbou-ingenieurs maak hulle merk by Nampo 2011/ Agricultural engineers make their mark at Nampo 2011

(by Louis Le Grange)

Vir die tweede agtereenvolgende jaar het die landbou-ingenieurs uitstalling by Nampo 2011 'n groot hoeveelheid mense van die beroep bewus gemaak. Ten minste een besoeker aan die 2010 uitstalling het in 2011 ingeskryf vir die voorgraadse kursus en reeds die eerste ses maande van sy Universiteitsopleiding aan die Universiteit van KwaZulu-Natal geslaag.

Die algemene publiek se kennis oor die beroep is bitter skraal en die algemene reaksie was: "ek het nie van die bestaan van so 'n rigting geweet nie" en "dit is wonderlik om te hoor dat julle landbou-ingenieurs kos op ons tafel sit".

Selfs die landbou-publiek wat hier en daar van die beroep bewus was, het nie 'n besef van die wye verskeidenheid velde waarin landbou-ingenieurs

*Foto 1: At van Coller, president van SAIEE, besig om landbou-ingenieurswese*



*aan voornemende studente te bemark.  
Photo 1: At van Coller, president of SAIEE, involved in the marketing of agricultural engineering to prospective students.*

*For the second consecutive year the agricultural engineers exhibition at Nampo 2011 made people aware of the profession. At least one visitor to the 2010 exhibition had registered in 2011 for the undergraduate program and already successfully*

hulle kan bystaan gewet nie. Die reaksie daar was: "as ek maar gewet het 'n landbou-ingenieur kan dit doen" en "as ek dit gewet het sou ek my kind aangemoedig het om dit te studeer" en dan natuurlik die hoogtepunt vir 'n uitstaller: "gee bietjie daai pamflet dat ek en my kind daarna kan kyk, waar kontak ons jou nou weer?"

As bewusmakingsveldtog was die uitstalling, wat deur die SA Instituut van landbou-ingenieurs (SAII) en die Universiteit van KwaZulu-Natal se skool vir Bio-hulpbron ingenieurswese en omgewingshidrologie opgestel en beman was, uiters suksesvol.

Die vakansiedag in die middel van die uitstalling het vanjaar veroorsaak dat die kinders en voornemende studente saam met hulle ouers die uitstalling besoek het, wat tot baie goeie navrae en belangstelling gelei het. Inligting is verskaf aan voornemende studente van so jonk as 7 jaar, ons glo mos om vroeg te plant en dan gereeld te besproei om 'n goeie oes te verseker.

Dit is 'n konstante proses om die beroep te bemark en die persoonlike kontak met die publiek op Nampo dra baie by tot die suksesvolle oordrag van die boodskap dat landbou-ingenieurs 'n integrale rol speel by alle aspekte van die voedselketting.



*Foto 2: Louis Lagrange, Neels Bezuidenhout en At van Coller het hulle hande vol gehad met die letterlike toestroming van die belangstellendes, keelpille was nodig aan die einde van elke dag*

*completed six months of his university education at the University of KwaZulu-Natal.*

*The general public's understanding of the profession is very limited and the general reaction was "I did not know about the existence of such a field of study" and "it is wonderful to hear that you agricultural engineers put food on our tables."*

*Even the agricultural public which had partial knowledge of this profession did not realise the diverse fields in which agricultural engineers could be of assistance. Reactions included "If only I knew that an agricultural engineer can do this" and "If I had known this I would have encouraged my child to study in this field" and then to the exhibitors' satisfaction of course "Please pass me that pamphlet so that my son/daughter and I can look at it, where can we contact you?"*

*As an awareness campaign, the exhibition was an exceptional success. The stand was constructed and manned by the SA Institute of Agricultural Engineers (SAIAE) and the University of KwaZulu-Natal's school for bio-resource engineering and environmental hydrology.*

*The public holiday during the middle of the exhibition enabled children and prospective students to attend the exhibition together with their parents. This led to a large number of enquiries and interest. Information was provided to prospective students as young as 7 years old; which supports our practice of planting early and irrigating regularly to ensure a prosperous harvest.*

*It is a constant process to market this career and the personal contact with the public at Nampo greatly contributes to the successful transfer of the message that agricultural engineers play an integral role during all aspects of the food chain.*



# Engineering Jobs

(by At Van Coller)



The Directorate Infrastructure Support in the Department of Agriculture Forestry and Fisheries have 2 Chief Engineers posts vacant as well as 7 Engineer posts. These posts will be advertised shortly. Advertisements will be placed in the Rapport and Sunday Times as well as on the web page of the department [www.daff.gov.za](http://www.daff.gov.za).

One Chief Engineer post is responsible for project planning which entail the area wide concept of project planning and implementation. The applicant needs to have at least ten (10) years post registration as Professional Engineer with ECSA experience. It is further required that the applicant must have advanced training and experience in ArcView and modelling modules attached to the software, AutoCad, PSNext Project Management and decision making software. An M Eng in Project Management would improve the applicant's chances. The applicant will manage a team of engineers and technicians on various projects and work closely with provinces on priority projects identified. The unit addresses all agricultural engineering aspects encountered on and off farm along the complete value chain of agricultural production.

The second Chief Engineer post is responsible for the Construction unit which includes drilling of boreholes, border fence construction and maintenance and repair of soil conservation structures. The applicant needs to have at least ten (10) years post registration as Professional Engineer with ECSA experience. An M Eng in Project Management would improve the applicant's chances. The applicant will manage 170 personnel divided into five operational teams. The applicant will have to manage all aspects of project execution and adherence to all relevant legislation, regulation, codes and best practices. The applicant will have to demonstrate knowledge and experience dealing with the relevant issues required. A thorough knowledge of PSNext project management software is required.

The 7 Engineer posts will assist the Chief Engineer Project Planning with planning, design, specification, tendering, evaluation, implementation and advisory services on agricultural engineering aspects covering soil conservation, irrigation and drainage, farm buildings, mechanization, energy, processing, storage and marketing infrastructure both on and off farm. The applicants have to be registered as Professional Engineers with ECSA. It is expected from them to have developed experience in a specific field within the range mentioned. They must be able to work with the software used in the directorate.





## Membership Matters

(by Rika Reinders)

We would like to welcome the following new members to the Institute:

Mr SJP Eloff	Member
Ms A Kassim	Graduate
Mr ST Makombe	Member
Mr K Mandaza	Member
Mr MJ Radley	Member
Mr C Sambo	Student
Mr RJ van der Merwe	Member

Members are reminded to send through proof of payment of membership fees. When making payments, please use the invoice number, or the first three letters of your surname together with the number as shown under "Rekening/Account" on the invoice, as reference for the transaction, as this makes it possible for the secretariat to trace payments from the bank statement.

Fellow KO Bang and Member JA Gilfillan has resigned from SAIAE. The secretariat wishes to remind members that when they reach retirement age, they are welcome to apply to change their membership to the Pensioner category which has lower annual fees than the active member and fellow categories.

For any administrative or financial queries, please contact Rika Reinders in the SAIAE office on (012) 842-4043 (Mon & Fri 09:00-13:00).

The current SAIAE council consists of the following members

At van Coller	- President	Pranesh Moodley	Chairman KZN Branch
Isobel van der Stoep	- Vice-president	Jabulani Jiyane	Additional Member
Jeff Smithers	- Past President	Sipho Sibande	Additional Member
Felix Reinders	- Honorary Secretary	Peter Lyne	Additional Member
Piet Snyman	- Chairman: Pretoria branch	Neels Bezuidenhout	Additional Member



# Nuwe Eregenote / New Honorary Fellows

By: Felix Reinders

Die Suid Afrikaanse Instituut van Landbou Ingenieurs het tydens hulle Gala Dinee wat saamgeval het met hulle Voorgesette Professionele Opleidingsgeleentheid drie van sy lede met Ere Genootskap vereer. Dit is die hoogste vorm van lidmaatskap wat SAILI aan 'n lid kan toeken. SAILI is trots op Mnre Hugo en Murray en Prof du Plessis wat diep spore getrap het in die Instituut oor al die jare. Baie geluk!



*In foto: van links na regs: Mnr Frans Hugo, Mnr Johann Murray en Prof Rennie du Plessis*

*In the photo: from left to right: Mr Frans Hugo, mr Johann Murray and Prof Rennie du Plessis*

Three members were honored by the South African Institute for Agricultural Engineers at the Gala dinner during the Continuous Professional Development event in 2010 by receiving Honorary Fellowships. SAIAE proudly presented this highest order of membership to Messrs Frans Hugo and Johann Murray and Prof Rennie du Plessis for their contributions to the agricultural engineering profession.



# Biofuels contribution to job creation and SA's economy

(Shortened article by: Eleanor Seggie. Originally published by Creamer Media's Engineering News Online, accessed on 17 May 2011)



The recent publication of a new standard for biofuels is an important step towards creating a local biofuels industry, says the South African Bureau of Standards (SABS).

This will assist the production and suppliers, particularly those producing small batches of biodiesel, in managing their quality requirements in a more cost-effective way. The standard will be used by all the biodiesel manufacturers that have constant feedback. End-users of the biodiesel and biodiesel blends will also be able to use the standard to ensure that the production that they are receiving from the manufacturer or distributor is fit-for-purpose.

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Biofuels are becoming increasingly important worldwide, not only to replace expensive, important crude oil, but also to create jobs and improve the security of food supplies. Government's current strategy envisions 2% of national petrol and diesel use coming from biofuels, such as bioethanol and biodiesel, by 2013, thereby creating an estimated 25 000 jobs.

South Africa's New Growth Plan (NGP) indicates that the renewable energy sector, including the biofuels sector, will be used as one of the vehicles for job creation in the country. The Department of Energy (DoE) reports that the strategy's objectives focus mainly on tackling poverty and economic capacity to be developed in the rural areas, job creation and contributing to the renewable-energy target, greenhouse-gas emission reduction and sustainable development. The strategy is a modest target of 2% contribution of final liquid fuels consumption by 2013, or 400-million litres a year. But the current use of biofuels is limited to private fleets and, therefore negligible, and with only two years to go, it is unlikely that the 2% target will be met.

The regulatory infrastructure still needs to be placed to encourage industry players on a broad scale, while strategy's ban on the use of maize as a feed material for biofuels production may also be one of the reasons for the delays. From a regulatory point of view, the cost of uptake of the fuels needs attention before biofuels production can be successfully rolled on a broad basis. In the majority of countries where biofuels have been successfully introduced into the liquid market, there has been some financial support to ensure the economic viability of the effort. Without government's financial incentivisation, wide acceptance of a liquid fuels component, that would cost more than the crude-based, is unlikely.

No grains are used for biofuels and maize is still excluded from the government's biofuels policy. This is a lost opportunity, as South Africa is able to produce maize over and above its food demand and by using it for biofuels production, it could add value through rural economic development, employment and tax contribution. It is noted that South Africa is about to become an important net maize country, owing to recent advances in seed technology and improved production practices.

It has been suggested that, instead of excluding a commodity such as maize completely, the country should follow the examples of the US, which has a policy in place aimed at ensuring food security. The country has three triggers in place, two of which are linked to a sudden increase in food inflation and a minimum required stock-to-use ratio of maize. If these are triggered the production of biofuels is lowered for a year to favour food security.

Internationally, there is a growing understanding that biofuels can contribute to the global energy needs without competing directly with the food pool. There is also the understanding that biofuels can help with issues of climate change if the technology is currently implemented. The benefits of biofuels include their potential to provide a source of foreign exchange saving of oil-deprived countries, the boosting of local agricultural production, additional markets and revenue for farmers, their contribution to political security, making Africa less dependent on oil, and creating local wealth. The risks to bear in mind include a lack of infrastructure, support services and crucial capital investment.

It is worrying that virtually no research has been done in Southern Africa on suitable agricultural crops for sustainable biofuels production without adversely affecting biodiversity and conservation. While biofuels may be resurfacing on the local energy agenda, expert comments make it clear there is still much to be considered. Further investment in infrastructure and support services and research into their environmental implications and alternative, suitable agricultural crops, are required.

DIE SUID-AFRIKAANSE INSTITUUT VAN LANDBOU-INGENIURS /  
THE SOUTH AFRICAN INTITUTE OFAGRICULTURAL ENGINEERS

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