

Departments in the Agricultural Sciences



Department of Agricultural Economics

Prof. Johan Willemse

Overview

he approach of the Department of Agricultural Economics is to equip students to be outstanding agricultural economists and to contribute to community service through research and the practical application of their knowledge. In 2007 the department continued to improve curricula, add new incentives and apply knowledge in various research projects linked to the industry and the fields of expertise of staff.

Altogether, 21 M.Sc. and 21 Ph.D. students enrolled for studies in the department. This includes students from Eritrea, Mozambique, Nigeria, Namibia, Botswana, Lesotho, Ethiopia, Swaziland, Ghana and South Africa, amongst others.

Prof. Klopper Oosthuizen was appointed by the International Commission on Irrigation and Drainage to lead a symposium in Lahore, Pakistan on socio-economic aspects of agricultural production in developing countries. Dr Wimpie Nell was elected as a member of the council of the International Farm Management Association (IFMA) to represent Southern Africa.

Prof. Johan Willemse, Departmental Chairperson, was appointed as an independent non-executive director of the Absa Group and vice-chairperson of the Agricultural Economics Association of South Africa (AEASA).

The 20th FR Tomlinson commemorative lecture of the AEASA was hosted by the department and Prof. Oosthuizen received an honorary medal.

Staff of the department attended the 16th International Farm Management Conference in Cork, Ireland.

During 2007, the Centre for Agricultural Management was appointed by the national Department of Agriculture as a Centre of Excellence for the roll-out of small, medium and micro enterprises (SMME). The UFS was one of three educational institutions identified to host such a Centre of Excellence. The first course for extension officers commenced in November 2007.

Most of the work and research at the department is done on a group basis, although individual research is also done extensively. The research team of Prof. Giel Viljoen consists of Drs Godfrey Kundhlande and Jack Armour, Mr Mompati Baiphethi and Ms Heidi Mabannda. The team's research focuses on the generation of information to improve efficiency and sustainability in the use

and management of natural resources, water and land. Research focus areas include assessing the impacts and management of natural disasters like floods and droughts, saline irrigation water and rain water harvesting techniques.

Two students graduated from the group in 2007, namely Mr Armour who received a Ph.D. degree with a dissertation entitled: Multi-dimensional models for the sustainable management of water quantity and quality in the Orange-Vaal-Riet convergence system and Ms Mabannda, who received a master's degree with a minidissertation entitled: An assessment of the role and influence of commodity and financial markets on the sustainable adoption of the in-field rainwater harvesting (IRWH) technique by resource poor small scale farmers in Thaba Nchu.

The initiative of the department to support educators and to enable them to prepare their learners to meet the National Curriculum Standards in Economics and Management Sciences (EMS) at the General Education and Training (GET) level and Economics at the Further Education and Training (FET) level was established in 2007. This initiative is carried out in cooperation with the provincial Department of Education, the National Council of Economic Education (NCEE) in the United States of America (USA) and the South African Foundation for Economic and Financial Education (SAFEFE). In this case, SAFEFE will play a role similar to that of the South African Mathematics Foundation.

At international level various activities were funded by the NCEE. 31 South Africans from six provinces (19 staff members of the provincial departments of education and 12 UFS staff members) completed the Train the Trainers programme; 53 South Africans from six provinces were selected to participate in the first all-South African Train the Trainers programme; eight graduates of the Train the Trainer programme were selected to participate in the NCEE year-long Train the Writer programme (including a one-week workshop in Bucharest, Romania); the NCEE hosted a delegation of four education leaders from the Free State and KwaZulu-Natal in the USA and two graduates of the Train the Trainers programme from the Free State were invited to the USA for a study tour. Other activities included: graduates of the Train the Trainers programme were supported through three alumni projects; an introductory teachers' workshop was conducted in KwaZulu-Natal for 45 participants; and five educational leaders from the Free State and

KwaZulu-Natal were hosted at the 2007 NCEE annual conference in Denver, Colorado in the USA.

At local level various activities were carried out by SAFEFE. This included an Economic Literacy Olympiad which was introduced for the first time to all I 300 GET schools in the Free State. The Olympiad was conducted over four rounds. More than 400 teachers and 2500 learners were involved. The plan is to expand the project to include 200 schools in the Northern Cape and to have an inter-provincial competition. In another project 123 Learning Area Managers and Subject Advisors in the Northern Cape and 77 FET teachers in the Free State were trained. Ten lessons were developed for the foundation phase at GET level and presented to 78 Learning Facilitators in the Free State and KwaZulu-Natal. An NCEE alumni project in the Eastern Cape was approved to develop an Olympiad for Economics at FET level in 2008. In November 2007, I20 GET teachers were trained. Pre- and post-testing was conducted which will be followed up with pre- and post-testing of their learners for research purposes.

It is important that the UFS develops extensive engagement with learners from pre-school up until Grade 12 regarding research, teaching and outreach that touches all parts of the university and includes programmes that represent the best in partnerships—enduring, collaborative, complementary and focused on issues of importance to the UFS and the Free State.

The department continues to excel in community service. Many of the research projects have a strong community service component. These specifically include contact sessions on the Main Campus with the SADC PRINT project, in which the countries of the Southern African Development Community (SADC) participate.

A unit for Livestock and Wildlife Economics was established in the department during 2007, focusing on research. The team consists of Prof. Kobus Laubscher, Messrs Pieter Taljaard, David Spies and Flippie Cloete.

Prof. Willemse and his research assistant Ms Lize Terblanche conduct quarterly Market Outlook Workshops for farmers and agri businesses. These workshops were well attended (averaging 300 attendees) by farmers from throughout South Africa. Guest speakers included Mr Neil



The department presented a workshop on agricultural strategy on the Main Campus in Bloemfontein. The workshop was facilitated by Ms Chantelle Ilbury, co-author with Clem Sunter of the book Games Foxes Play - Planning for Extraordinary Times. At the workshop are, from the left: Mr Willie Anderson, agricultural economist from PFS in Ladybrand, Ms Ilbury, Profs Kobus Laubscher, Associate Professor in the department, and Johan Willemse, Departmental Chairperson and co-facilitator of the workshop.

Jacobson, a director from Future World, and Ms Chantel Ilbury, co-author of Games Foxes Play - Planning for Extraordinary Times by Mr Clem Sunter. They also presented agricultural economic market and scenario presentations to farmer groups and assisted various agricultural organsiations in this regard.

The Centre for Agricultural Management presented two financial management courses to a total of 22 farmers and one strategic management course to 11 farmers. The centre also coordinated one three-day dairy processing course attended by six people, and one course in the processing of meat, attended by 27 people. A farm management course was presented to ten farmers at the Lengau Agricultural Development Centre.

The centre is also involved in assisting the Lower Majaekgoro Trust with business plans and training. Three courses were presented to the ten farmers of the Trust, namely Farm Management, Horticultural Management and the Management of the Finances of a farming business.

A Food Garden Management course was presented by the Centre for Agricultural Management during December 2007. Also attending the training course were three dietician students from the UFS. Because of their engagement at the Botshabelo District Hospital, the students requested the centre to help them start a food garden at the hospital.

A short course on vermiculture and vermicomposting at the Mangaung University Community Partnership Programme (MUCPP) was attended by 17 people. The vermicomposting project at MUCPP is growing well and will be expanded to the Tshwaraganang Garden Project and the MUCPP Health Centre. As a result of this course a manual has been written. The centre has since been contacted by various community projects and individuals for assistance in starting vermicomposting.

Dr Ntsikane Maine was guest speaker at the first women's seminar held by the student chapter of the Black Management Forum (BMF) at the UFS. The BMF's student chapter was launched at the UFS in 2006.

Students in the department excelled at the 45th Annual Conference of the AEASA held in Johannesburg. The organising committee received 53 paper submissions, of which 35 were selected for presentation at the conference. Of the 35 papers, 15 were from students of the department, including one upgraded paper.

Students and lecturers who participated in the conference received various awards: Prof. Johan Willemse, Messrs Pieter Taljaard and Dirkie Strydom received the first prize for the best poster, Mr Henry Jordaan received the first prize for the best master's thesis, Messrs Jordaan and Bennie Grové received the third prize for the best paper, and Ms Leandré du Preez was awarded the prize

Staff

Professors: Profs Klopper Oosthuizen, Giel Viljoen

Professors Extraordinary: Profs Jan Groenewald, Dr Kit le Clus

Associate Professors: Profs Johan Willemse, Kobus Laubscher

Affiliated Associate Professors: Profs André Jooste, Daan Louw

Senior Lecturers: Drs Wimpie Nell, Ntsikane Maine, Mr Kobus van Staden

Lecturers: Drs Godfrey Kundhlande, Jack Armour, Messrs Pieter Taljaard, Olu Oyewumi, Henry Jordaan, Bennie Grové

Senior Typist: Ms Dora du Plessis

Senior Officer: Ms Marie Engelbrecht

Officer: Ms Ina Combrinck

Typist/Clerical Assistant: Mss Wilna du Plessis, Francia Neuhoff, Chrizna van der Merwe

Secretary: Ms Louise Hoffman

Professional Officer: Ms Annely Minnaar

Research Assistants: Ms Lize Terblanche, Nicky Matthews, Leandré du Preez, Messrs Ferdie Botha, Flippie Cloete, Attie du Plessis, Philip Fourie, Wim Grobbelaar, Marvin, Khaile, Abraham Landman, Frikkie Maré, Salomo Mbai, Lesedi Modo, Petso Mokhatla, Abiodun Ogundeji, Louis Smith, David Spies, Dirkie Strydom, Walter van Niekerk, Derrick Sissons

Contact details

Prof. Johan Willemse

Faculty of Natural and Agricultural Sciences Department of Agricultural Economics University of the Free State PO Box 339 Bloemfontein South Africa

Telephone: +27 51 401 3862 **Fax:** +27 51 401 3473

E-mail: willemsebj.sci@ufs.ac.za **Website:** www.ufs.ac.za/agri-econ

for the best Agricultural Economics student at the UFS.

The department hosted two visiting professors from the USA, namely Prof.

Dixie Reeves from Virginia Tech and Prof. Rodney Smith from the University of Minnesota. Three students from Dronten Professional Agricultural University in the Netherlands also visited the department.



Third-year students of the department had to take part in a competition as part of a course in Marketing. The students had to manage the price of white mealies for delivery in July 2007 by buying and selling on Safex. The competition ran from 25 April 2007 to 25 May 2007. During this period, the market grew from R1 650 to R1 712 per ton. The winning group achieved a price of R1 777 per ton, hereby beating the market by R65 per ton or almost 4%. From the left are: Messrs Llewellyn Eastman, member of the winning group, Frikkie Maré, member of the winning group, Willem Zwiegers, leader of the winning group, Dr Kit le Clus, Professor Extraordinary at the department, and Mr Pieter Taljaard, Lecturer at the department.

Research outputs

Research articles

Armour, R.J. & Viljoen, M.F. 2007. An economic case for drainage for sustainable irrigation: Case studies in the lower Vaal and Riet catchments. South African Journal of Economic and Management Sciences (Special Environmental Issue) December 2007: 470-481.

Asfaha, T. & Jooste, A. 2007. The effect of monetary changes on relative agricultural prices. *Agrekon* 46(4): 460-474.

Cloete, P.C., Taljaard, P.R. & Grove, B. 2007. A comparative economic case study of switching from cattle farming to game ranching in the Northern Cape Province. South African Journal of Wildlife Research 37(1): 71-78.

De Villiers, G.D.U.T., Viljoen, M.F. & Booysen, H.J. 2007. Standaard residensiele vloedskadefunksies vir Suid-Afrikaanse toestande. Suid-Afrikaanse Tydskrif vir Natuurwetenskap en Tegnologie 26(1): 26-36.

Grove, B. & Oosthuizen, L.K. 2007. Establishing a benchmark for comparing relative cost-effectiveness of an alternative policy instrument for controlling non-point source pollution. *Water* SA 33(5): 609-614.

Grove, B., Taljaard, P.R. & Cloete, P.C. 2007. A stochastic budgeting analysis of three

alternative scenarios to convert from beefcattle farming to game ranching. Agrekon 46(4): 514-531.

Holtzhausen, S.M., Nell, W.T. & Maine, N. 2007. Using a mirror, microscope and binoculars to reflect on a strategic agricultural management community service learning module. *Journal for New Generation Sciences* 5(1): 13-30.

Jordaan, H. & Grove, B. 2007. Factors affecting maize producer's adoption of forward pricing in Price Risk Management: The case of Vaalharts. *Agrekon* 46(4): 548-565.

Jordaan, H., Grove, B., Jooste, A. & Alemu, Z.G. 2007. Measuring the price volatility of certain field crops in South Africa using the ARCH/GARCH approach. Agrekon 46(3): 306-322.

Maine, N., Nell, W.T., Lowenberg-Deboer, J. & Alemu, Z.G. 2007. Economic analysis of Phosphorus applications under variable and single-rate applications in the Bothaville District. Agrekon 45(4): 532-547.

Olubode-Awosola, O.O., Idowu, E.O. & Van Schalkwyk, H.D. 2007. Assessing irrigation projects performance for sustainable

irrigation policy reform. *Irrigation and Drainage* 20(2-3): 303-315.

Oyewumi, O.A. 2007. An overview of the global economy: Markets, competitiveness and trade facilitation - Executive interview with Honorable Carole L. Brookins (U.S. Executive Director to the World Bank 2001-2005). *International Food and Agribusiness Management Review* 10(2): 205-218.

Oyewumi, O.A., Jooste, A., Britz, W. & Van Schalkwyk, H.D. 2007. Tariff and tariff rate quota liberalization in the South African livestock industry: Approaches to welfare measurement. *Agrekon* 46(1): 1-22.

Scheepers, S.V., Jooste, A. & Alemu, Z.G. 2007. Quantifying the impact of phytosanitry standards with specific reference to MRLs on the trade flow of South African avocados to the EU. Agrekon 46(2): 260-273.

Shongwe, M., Jooste, A., Hugo, A., Alemu, Z.G. & Pelser, A.J. 2007. Will consumers pay for less fat on beef cuts? The case in Bloemfontein, South Africa. *Agrekon* 46(4): 475-493.

Chapters in books

Yokwe, S., Nell, W.T. & Marinova, D. 2007. Technology transfer and adoption by small-scale women farmers: A case study in Qwaqwa district in South Africa. In The International Handbook On Environmental Technology Management: Part V - Case Studies In New Technologies For The Environment, edited by D. Marinova, D. Annandale & J. Phillimore. Northampton Massachusetts, UK: Edward Elgar Publishing. pp. 492-504.

Reports

Armour, R.J. & Viljoen, M.F. 2007. Orange-Riet, Orange-Vaal and Lower Orange models report: Analysis of the financial and economic feasibility of drainage in the Orange-Vaal-Riet and Lower-Orange irrigation areas. Report about project no. K8/703/4 to the Water Research Commission, Pretoria, South Africa.

Hoon, G.J., Watson, M., Armour, R.J. & Letsela, L. 2007. The Free State River ecosystem project: The Koranna and Sepane spruit in the Modder River catchment area. Intervention plan for inland water ecosystem demonstration areas in the Free State. Report no. 64/2007 to South African National Biodiversity Institute (SANBI): National Grasslands Biodiversity Programme, Kirstenbosch, South Africa.

Jooste, A. & Spies, D.C. 2007. Options for promoting South African wool. Report to Cape Wools, Cape Town, South Africa.

Kundhlande, G., Baiphethi, M.N., Mabannda, H.N., Matebesi, S.Z., Mdibe, N., Minkley, G.A., Jubisa, Z., Anderson, J. J., Magingxa, L.L., Botha, J.J. & Viljoen, M.F. 2007. Rain water harvesting research: Scoping report on selection of study areas and communities. Report on project no. K5/1648 to the Water Research Commission, Pretoria, South Africa.

Kundhlande, G., Baiphethi, M.N., Mabannda, H.N., Matebesi, S.Z., Mdibe,



Four educators from South Africa recently visited the National Council on Economic Education (NCEE) in the United States of America (USA) on an exchange programme to study economic education delivery systems. The NCEE is a non-profit educational organisation in the USA with a nationwide network of university-based centres for economic education. The South African delegation met with the department of education in Minnesota, staff from the national department of education in Washington DC and representatives of the South African Embassy, amongst others. From the left are: Dr Patty Elder, Vice-President: International Economics of the NCEE, Ms Faith Ndaba, Chief Director: Curriculum Management, Department of Education in the Free State, Dr Thula Mbatha, Chief Director: Curriculum, Department of Education, KwaZulu-Natal, Representative Betty McCollum, Education and Related Matters in Washington DC, Prof. Klopper Oosthuizen, from the department, Dr Nhlanhla Ngcobo, Director: Teacher Development, Department of Education in KwaZulu-Natal, and Prof. Claudia Parliament, Executive Director: Minnesota Council on Economic Education.



Prof. Klopper Ooshuizen delivered a paper during the FR Tomlinson Commemorative Lecture on the Main Campus in Bloemfontein entitled: Economics education: aspirations and responsibilities of the profession. The commemorative lecture is presented by the Agricultural Economics Association of South Africa (AEASA) to give recognition to contributions made to the Agricultural Economics discipline in South Africa. Attending the lecture are, from the left: Mr Niel Pretorius, Provincial Manager: Agriculture, Standard Bank, Dr Moraka Makhura, President of AEASA, and Prof. Oosthuizen with an award he received from the AEASA.

N., Minkley, G.A., Jubisa, Z., Anderson, J. J., Magingxa, L.L., Botha, J.J. & Viljoen, M.F. 2007. Rain water harvesting research: Report on processes followed in obtaining community consent, endorsement, cooperation and participation in selected study areas. Report on project no. K5/1648 to the Water Research Commission, Pretoria, South Africa.

Kundhlande, G., Baiphethi, M.N., Mabannda, H.N., Matebesi, S.Z., Mdibe, N., Minkley, G.A., Jubisa, Z., Anderson, J. J., Magingxa, L.L., Botha, J.J. & Viljoen, M.F. 2007. Rain water harvesting research: Report on current rain water harvesting and conservation practices in selected study areas. Report on project no. K5/1648 to the Water Research Commission, Pretoria, South Africa.

Kundhlande, G., Baiphethi, M.N., Mabannda, H.N., Mdibe, N., Minkley, G. A., Mlomzale, M.N., Botha, J.J., Magingxa, L.L., Nhlabatsi, N., Anderson, J.J. & Viljoen, M.F. 2007. Rain water harvesting research: Report on stakeholder workshops. Report on project no. K5/1648 to the Water Research Commission, Pretoria, South Africa.

Le Clus, C.F., Esterhuisen, P., Van Zyl, G., Lottering, G., Vivier, F. & Chiziwa, P. 2007. Develop an operational plan for the implementation of a pilot warehouse receipt system in Malawi. Report to the World Bank.

Le Clus, C.F., Jooste, A., Van der Walt, W. J. & Van Wyk, M. 2007. The impact of possible restrictions on the trade in GM maize on the South African maize industry. Report to the Maize Trust, Pretoria, South Africa.

Le Clus, C.F., Jooste, A., Van der Walt, W. J. & Van Wyk, M. 2007. The potential impacts of genetically modified maize on the South African maize trade. Report to the Maize Trust, Pretoria, South Africa.

Pott, A.J., Benade, N., Van Heerden, P.S., Grove, B. & Annandale, J.G. 2007. Technology transfer and integrated implementation of water management models in commercial farming. Report on project no. K5-1481 to the Water Research Commission, Pretoria. South Africa.

Sandrey, R., Jensen, H.G. & Oyewumi, O. A. 2007. Trade law center or southern trade policy options for Nigeria: A GTAP analysis, Africa. Report to the Trade Law Centre for Southern Africa (Tralac), Tralac working paper no. 10/2007, Stellenbosch, South Africa.

Sandrey, R., Oyewumi, O.A, Nyhodo, B. & Vink, N. 2007. South African agriculture protection: How much policy space is there? Trade law center for Southern Africa. Report to the Trade Law Centre for Southern Africa (Tralac), Tralac working paper no. 4/2007, Stellenbosch, South Africa.

Van Schalkwyk, H.D. 2007. Establishment of a commercial agricultural forum. Report to Thabo Mofutsanyana District Municipality, South Africa.

Viljoen, M.F., Du Preez, C.C., Groenewald, H.B., Blair, V.G. & Viljoen, C.P. 2007. Prefeasibility study of the Koppies irrigation scheme.

Report to the Free State Department of Agriculture, Bloemfontein, South Africa.

Viljoen, M.F., Kundhlande, G., Baiphethi, M.N., Mabannda, H.N., Matebesi, S.Z., Mdibe, N., Minkley, G.A., Jubisa, Z., Magingxa, L.L., Anderson, J.J. & Botha, J.J. 2007. Rain water harvesting research: Overview report on available knowledge regarding RWH&C and the related socio-economic relationships and issues. Report on project no. K5/1648 to the Water Research Commission, Pretoria. South Africa.

Conference contributions

Armour, R.J. & Viljoen, M.F. 2007. An economic case for drainage & leaching using case studies in the Orange and Vaal catchments of South Africa. Paper presented at the International Commission on Irrigation and Drainage (ICID) 2nd African Regional Conference: Contribution of rainfed and irrigated agriculture to poverty alleviation through increased productivity in Africa, South African National Committee on Irrigation and Drainage (SANCID), Glenburn Lodge, Johannesburg, South Africa. 6-9 November.

Armour, R.J. & Viljoen, M.F. 2007. To drain or not to drain? Quantifying the value of "Green Box" grants required to ensure the sustainability of irrigation: A case study of Friarsdale in the Lower Orange River. Paper presented at the 45th Annual Conference of the Agricultural Economic Association of South Africa (AEASA), Indaba Hotel, Johannesburg, South Africa. 26-28 September.

Asfaha, T.A. & Jooste, A. 2007. Forecasting performance of selected econometric agricultural commodity market models. Paper presented at the 45th Annual Conference of the Agricultural Economic Association of South Africa (AEASA), Indaba Hotel, Johannesburg, South Africa. 26-28 September.

Avenant, M.F., Van Tonder, G.J., Watson, M., Seaman, M.T., Armour, R.J., Barker, C.H., Dollar, E., Du Preez, P.J., Hughes, D., King, J. & Rossouw, L. 2007. Investigations into the methodology for setting environmental water requirements in non-perennial rivers. Paper presented at the 8th WaterNet / WARFSA / GWP-SA Symposium: Integrated Water Resource Management, Lusaka, Zambia. 30 October - 2 November.

Awosola, O.O. & Van Schalkwyk, H.D. 2007. The implications of research methods on agricultural policy development: A case study of South African land redistribution. Paper presented at the 4th Forum for African Agricultural Research in Africa (FARA), Sandton Convention Center, Johannesburg, South Africa. 11-16 June.

Awosola, O.O. & Van Schalkwyk, H.D. 2007. South African land and market reforms: Equity versus efficiency. Paper presented at the 16th International Conference for Farm Management (IFMA), Cork, Ireland. 15-20 July.

Awosola, O.O., Van Schalkwyk, H.D. & Jooste, A. 2007. Potential effects of agricultural land tax on farm resource use and output supply response in South Africa. Paper presented at the 45th Annual Conference of the Agricultural Economic Association of South Africa (AEASA), Indaba Hotel, Johannesburg, South Africa. 26-28 September.

Baiphethi, M.N., Viljoen, M.F., Kundhlande, G. & Mabannda, H.N. 2007. The role of institutions in technology adoption among resource poor farmers: A case study of IRWH adoption in Thaba Nchu, Free State. Poster presented at the 45th Annual Conference of the Agricultural Economic Association of South Africa (AEASA), Indaba Hotel, Johannesburg, South Africa. 26-28 September.

Botha, C.F., Taljaard, P.R., Jooste, A. & Pelser, A.J. 2007. Segmenting the Free State Province (FSP) food consumer. Poster presented at the 45th Annual Conference of the Agricultural Economic Association of South Africa (AEASA), Indaba Hotel, Johannesburg, South Africa. 26-28 September.

Botha, L. & Van Schalkwyk, H.D. 2007. An inquiry into the evolving supermarket industry in Africa. Paper presented at the 17th Annual World Food and Agribusiness Forum: Symposium and Case Conference, Parma, Italy. June 23-26.

Cloete, P.C., Grove, B. & Taljaard, P.R. 2007. An economic risk analysis of game ranching in a semi-arid region of South Africa. Paper presented at the 16th International Conference for Farm Management (IFMA), Cork, Ireland. 15-20 July.

Fourie, P. & Van Schalkwyk, H.D. 2007. The market potential of the South African table grapes with the use of Trademaps. Paper presented at the 45th Annual Conference of the Agricultural Economic Association of South Africa (AEASA), Indaba Hotel, Johannesburg, South Africa. 26-28 September.

Grove, B. 2007. Factors affecting July futures price volatility in the South African maize industry. Workshop paper presented at the 45th Annual Conference of the Agricultural Economic Association of South Africa (AEASA), Indaba Hotel, Johannesburg, South Africa. 26-28 September.

Jooste, A., Britz, W., Van Schalkwyk, H.D. & Oyewumi, O.A. 2007. Trade liberalization in the South African livestock industry: Implications for rural development. Paper presented at the 2nd International Conference of the African Association of Agricultural Economists (AAAEII), La Palm Royal Beach Hotel, Accra, Ghana. 20-22 August.

Jordaan, H. & Grove, B. 2007. Factors affecting forward pricing behaviour: Implications of alternative regression model specifications. Paper presented at the 45th Annual Conference of the Agricultural Economic Association of South Africa (AEASA), Indaba Hotel, Johannesburg, South Africa. 26-28 September.

Jordaan, H. & Grove, B. 2007. Investigating factors affecting the forward pricing behaviour of

- Vaalharts maize producers: A two-step econometric approach. Paper presented at the 16th International Conference for Farm Management (IFMA), Cork, Ireland. 15-20 July.
- Jordaan, H. & Grove, B. 2007. Investigating factors affecting the forward pricing behaviour of Vaalharts maize producers: A two-step econometric approach. Proceedings of the 16th International Conference for Farm Management (IFMA), Cork, Ireland. 15-20 July. pp. 841-849.
- Kotze, L., Laubscher, J.M., Jooste, A., Alemu, Z.G. & Grove, B. 2007. Investigation into the data sources available to measure the success of land reform in the Free State. Paper presented at the 45th Annual Conference of the Agricultural Economic Association of South Africa (AEASA), Indaba Hotel, Johannesburg, South Africa. 26-28 September.
- Maine, N. 2007. Livestock-based livelihoods: Commercializing livestock production under communal and use system. Paper presented at the 16th International Conference for Farm Management (IFMA), Cork, Ireland. 15-20 July.
- Maine, N., Nell, W.T. & Lowenberg-DeBoer, J. 2007. Precision application of nitrogen fertilizer: The case of Bothaville. Paper presented at the 45th Annual Conference of the Agricultural Economic Association of South Africa (AEASA), Indaba Hotel, Johannesburg, South Africa. 26-28 September.
- Maine, N., Nell, W.T. & Lowenberg-Deboer, J. 2007. The profitability of variable-rate application of nitrogen. Paper presented at the 16th International Conference for Farm Management (IFMA), Cork, Ireland. 15-20 July.
- Matthews, N., Grove, B. & Kundhlande, G. 2007. Estimating input-specific recommendations for technically inefficient crop farmers. Paper presented at the 16th International Conference for Farm Management (IFMA), Cork, Ireland. 15-20 July.
- Matthews, N., Grove, B. & Kundhlande, G. 2007. Estimating input-specific recommendations for technically inefficient crop farmers. Proceedings of the 16th International Conference for Farm Management (IFMA), Cork, Ireland. 15-20 July. pp. 449-458.
- Mokhatla, P.Z., Maine, N. & Nell, W.T. 2007. Sustainable farmer settlement in South Africa. Paper presented at the 16th International Conference for Farm Management (IFMA), Cork, Ireland. 15-20 July.
- Mokoena, M.R., Jooste, A. & Alemu, Z.G. 2007. Agricultural exports response to trade policy reform and implementation in South Africa. Paper presented at the 45th Annual Conference of the Agricultural Economic Association of South Africa (AEASA), Indaba Hotel, Johannesburg, South Africa. 26-28 September.
- Monk, M., Grove, B. & Jordaan, H. 2007. Factors affecting July futures price volatility in the South African maize industry. Paper presented at the 45th Annual Conference of the Agricultural Economic Association of South Africa (AEASA), Indaba Hotel, Johannesburg, South Africa. 26-28 September.

- Napier, R.J. & Nell, W.T. 2007. How the world's leading farmers respond to global change. Paper presented at the Challenges and Opportunities Affecting the Southern African Agricultural Sector Conference, Midrand Conference Centre, Johannesburg, South Africa. 11-12 December.
- Napier, R.J. & Nell, W.T. 2007. Strategic management and productivity maximization in agriculture. Paper presented at the Challenges and Opportunities Affecting the Southern African Agricultural Sector Conference, Midrand Conference Centre, Johannesburg, South Africa. 11-12 December.
- Nell, W.T., Maine, N., Van Wyk, W.A.L. & Napier, R.J. 2007. Secure your competitive advantage in a turbulent global agricultural environment. Paper presented at the 16th International Conference for Farm Management (IFMA), Cork, Ireland. 15-20 July.
- Ogundeji, A.A., Botha, L., Jooste, A. & Van Schalkwyk, H.D. 2007. Government support and emerging livestock farmers: The case of Heilbron. Paper presented at the 45th Annual Conference of the Agricultural Economic Association of South Africa (AEASA), Indaba Hotel, Johannesburg, South Africa. 26-28 September.
- **Ogundeji, A.A., Oyewumi, O.A. & Jooste, A.** 2007. Error correction approach to modeling beef supply response in South Africa. Paper presented at the 17th Annual World Food and Agribusiness Forum: Symposium and Case Conference, Parma, Italy. 23-26 June.
- Ogundeji, A.A., Uchezuba, D. & Jooste, A. 2007. Econometric estimation of Armington elasticities for selected agricultural products of South Africa. Paper presented at the 45th Annual Conference of the Agricultural Economic Association of South Africa (AEASA), Indaba Hotel, Johannesburg, South Africa. 26-28 September.
- Oyewumi, O.A., Jooste, A. & Sandrey, R. 2007. How can the agricultural sector in South Africa contribute to economic growth? Paper presented at the 45th Annual Conference of the Agricultural Economic Association of South Africa (AEASA), Indaba Hotel, Johannesburg, South Africa. 26-28 September.
- Oyewumi, O.A., Jooste, A., Britz, W. & Van Schalkwyk, H.D. 2007. An application of micro-economic theory to trade modeling: empirical evidence. Paper presented at the 32nd Biennial Conference of the Economic Society of South Africa (ESSA), Indaba Hotel, Johannesburg, South Africa. 10-12 September.
- Seaman, M.T., Rossouw, L., Van Tonder, G.J., Vos, A.T., Watson, M., Avenant, M.F., Armour, R.J., Barker, C.H., Dollar, E., Du Plessis, J., Du Preez, P.J., Hughes, D. & King, J. 2007. Environmental water requirements (EWRs) of a non-perennial river: The Seekoei River example. Paper presented at the 10th International River Symposium and International Conference on Environmental Flows, Brisbane, Australia. 3-6 September.
- Strydom, D.B., Taljaard, P.R. & Willemse, B.J. 2007. Ethanol blending policies and the

- South African feed industry. Poster presented at the 45th Annual Conference of the Agricultural Economic Association of South Africa (AEASA), Indaba Hotel, Johannesburg, South Africa. 26-28 September.
- Taljaard, P.R., Spies, D.C. & Grove, B. 2007. Financial implications of replacing breeding material: A South African beef cow-calve case. Paper presented at the 16th International Conference for Farm Management (IFMA), Cork, Ireland. 15-20 July.
- Taljaard, P.R., Spies, D.C. & Grove, B. 2007. Financial implication of replacing breeding material: A South African beef cow-calve case. Paper presented at the 16th International Conference for Farm Management (IFMA), Cork, Ireland. 15-20 July.
- Uchezuba, I.D. & Jooste, A. 2007. Modeling trends in the agricultural GDP of South Africa: any evidence of persistence? Paper presented at the 45th Annual Conference of the Agricultural Economic Association of South Africa (AEASA), Indaba Hotel, Johannesburg, South Africa. 26-28 September.
- Van Schalkwyk, H.D. & Kotze, N.A. 2007. Imagining a different future: Future of agriculture in the Free State. Paper presented at the National African Farmers Union Conference, Boemfontein, South Africa. 5 November.
- Van Schalkwyk, H.D., Taljaard, P.R. & Strydom, D.B. 2007. Food vs. fuel: Are the right crops being used for supply in a continent that has a food shortage? Paper presented at the National Free State Provincial Government Seminar, Bloemfontein, South Africa. 20 November.
- Van Wyk, M., Jooste, A., Le Clus, K. & Van der Walt, W. 2007. Trade and welfare implications of genetically modified maize on South Africa. Paper presented at the 45th Annual Conference of the Agricultural Economic Association of South Africa (AEASA), Indaba Hotel, Johannesburg, South Africa. 26-28 September.
- Van Wyk, M., Taljaard, P.R., Jooste, A. & Briedenhann, E. 2007. The possible implications of ethanol production from maize in South Africa on the local animal feed industry. Paper presented at the 45th Annual Conference of the Agricultural Economic Association of South Africa (AEASA), Indaba Hotel, Johannesburg, South Africa. 26-28 September.
- **Viljoen, M.F.** 2007. The Southern Cape floods of August 2006: Overview and lessons learned. Paper presented at the 58th International Meeting of the International Commission on Irrigation and Drainage (ICID), Sacramento, California, United States. 30 September 5
- Waroka, T.K., Van Schalkwyk, H.D., Alemu, Z.G. & Ayele, G. 2007. Producer price and price transmission in a deregulated coffee market of Ethiopia. Paper presented at the 45th Annual Conference of the Agricultural Economic Association of South Africa (AEASA), Indaba Hotel, Johannesburg, South Africa. 26-28 September.