



*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

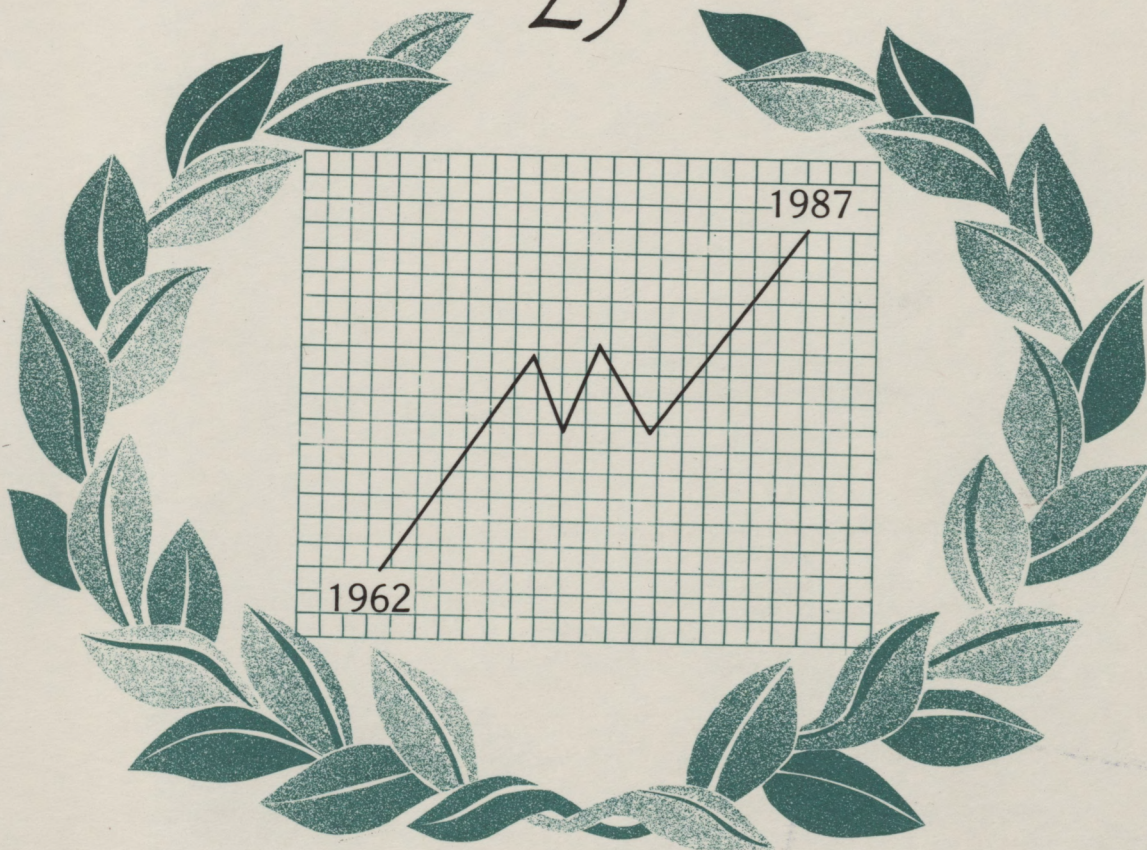
*No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.*



281.8  
Ag835

1  
FOUR-MONTHLY JOURNAL  
ON AGRICULTURAL ECONOMICS

25



USDA  
NAT'L AGRIC. LIBRARY  
RECEIVED  
APR 18 '88

# Agrekon

Vol. 26 No. 2  
JUNE 1987

Price R2,00  
(plus GST)



# ARTICLES AND PAPERS (AEASA AND AGROCON) PUBLISHED IN AGREKON SINCE INCEPTION IN JANUARY 1962

## Volume 1 No. 1 January 1962

- Problems of adaptation in agriculture - S.J.J. de Swardt
- The Division of Economics and Markets - A.J. du Plessis
- Control under the Marketing Act - H.J. van Rensburg
- The maize industry in South Africa: Danger signals for the future - A.P. Scholtz
- Farm-enterprise planning - S.P. van Wyk

## Volume 1 No. 2 April 1962

- South Africa's agriculture and the export trade - T.F. van der Walt
- Characteristics of co-operation - H.C. van Rensburg
- Contribution of the agricultural sector to the domestic income of the Republic - L.W.A. Nel
- The sheep and wool industry in South Africa - J.F. van Huyssteen

## Volume 1 No. 3 July 1962

- A general review of the dairy products' market in South Africa - P.H.J. Maree
- The development of agricultural co-operation in South Africa - I.S. Geldenhuys
- Possible adjustments in the maize industry - A.P. Scholtz
- All-risk crop insurance - O.E. Burger

## Volume 1 No. 4 October 1962

- The development of the South African citrus industry - I.D. Moore
- The agricultural policy of the European economic community - S.J.P. Smith
- The effects of the changes in the structure of wheat farming on the production cost of wheat - A.B.C. Nel and J.C. Strydom
- Problems of surplus production in a developed agriculture - F. Popping

## Volume 2 No. 1 January 1963

- The Union's farming resources - H.D. Leppan
- The problem of surpluses in the maize industry - W.P. Treurnicht
- Determination of an economic farming unit - S.P. van Wyk

- Statistical review of production, consumption, prices and trends of dairy products - T.A. du Plessis and L.W.A. Nel

## Volume 2 No. 2 April 1963

- The South African agricultural policy and its support measures - Editorial
- Bulk handling and storage of maize - H.F.F. Stutterheim
- A survey of the dried-fruit industry - T.C. Lochner
- Cost of distribution of vegetables and fruit - J.B. Bester

## Volume 2 No. 3 July 1963

- The South African Agricultural Union and its liaison with the Departments of Agriculture - J. van Heerden
- The South African fruit and vegetable canning industry and its markets - G.S. Glendining
- Financial aid to farmers by the State as applied to the 1959 assistance scheme - F. Popping
- Socio-economic development in the South African agriculture - O.E. Burger

## Volume 2 No. 4 October 1963

- The role of agriculture in the South African economy - A.J. du Plessis and C.J. Swanepoel
- The Division of Commodity Services: Its creation, function, extent and future organisation - B.J. Dippenaar
- A review of the egg industry - W.C.J. van Rensburg
- The agricultural economy of the Natal region - H.I. Behrmann

## Volume 3 No. 1 January 1964

- The effect of certain credit terms on economic farming units - S.P. van Wyk
- Labour planning of a diversified farm on the Transvaal Highveld - S.P. van Wyk and H.S. Hattingh
- A method for farm-enterprise planning - W.E. Kassier
- Reduce feed costs with silage - H.S. Hattingh

## Volume 3 No. 2 April 1964

- The Division of Commodity Services: Its creation,

function, scope and organisation - B.J. Dippenaar

A review of the development of the livestock and meat industries - J. Coetzee

An economic study of the poultry industry in Northern and Southern Rhodesia - W.V. Lacey

A labour budgeting technique with special reference to conditions in Natal - W.E. Kassier

#### Volume 3 No. 3 July 1964

Prices of dairy products for the 1963/64 season - National Marketing Council

The municipal produce market in the economic structure of South Africa - B.J. Dippenaar

Changes in primary resources in the South African agriculture - J.A. Groenewald

Economic implications of coffee production in South Africa - J.J. van Wyk

#### Volume 3 No. 4 October 1964

How the maize crop is marketed - *Mielienus*

The agricultural sector's share in the economic growth and prosperity of South Africa - L.W.A. Nel

The beginning of the farm-economic research in South Africa - H.I. Behrmann

Selling prices of rooibos tea, advances and levies for the 1964 crop - National Marketing Council

#### Volume 4 No. 1 January 1965

Agriculture: Trends and prospects, 1963/64 and 1964/65 - C. van der Merwe

All-risk crop insurance - O.E. Burger

The agricultural economy of the Highveld Region - S.W. van der Merwe

Differences in the growth of three sectors of the S.A. agriculture - J.A. Groenewald

#### Volume 4 No. 2 April 1965

International commodity agreements - W.H. Burger

The agricultural economy of the Winter Rainfall Region - P.R. Morkel

The regional contribution of agriculture to the Republic's gross domestic product - G.J. Wissing

The marketing problem of the fruit enterprise - C.D. van Schoor

#### Volume 4 No. 3 July 1965

Municipal markets at the cross roads - S.J.J. de Swardt

Advances, selling prices and levies payable on oilseeds, 1965/66 marketing season - National Marketing Council

An investigation into the economy of sheep farming - J. Jooste

A theoretical approach to the future of the wool industry - C.D. van Schoor

#### Volume 4 No. 4 October 1965

Some agro-economic views - S.J.J. de Swardt

Credit restriction and the agricultural industry - L.W.A. Nel

Egg prices for the flush season, 1964/65 - National Marketing Council

The registration policy of the Wheat Board for the baking industry - National Marketing Council

#### Volume 5 No. 1 January 1966

The economic nature of the challenge to South African agriculture - F.J. van Biljon

The development of production control in the wine industry - A.J. Beyleveld

Urban produce markets: A comparison of their set-up in South Africa with that in certain foreign countries - J.B. Bester

The need for market research in agriculture - P.R. Morkel

#### Volume 5 No. 2 April 1966

The development of production control in the South African sugar industry - J.K. Huntley

Price support in the U.S.A. with special reference to wool - P.J. Geyer

The production of sisal fibre in South Africa - J.J. van Wyk

#### Volume 5 No. 3 July 1966

Control of production and marketing of wattle bark - A.J. Beyleveld

Some important trends in beef production in South Africa - S.P. van Wyk

Essential requirements for increased beef production - J.L. van Zyl

The production and marketing of Karakul pelts - G.J.C. Kirsten

#### Volume 5 No. 4 October 1966

The determination of the economic optimum level of fertiliser application for silage production in the Eastern Cape - W.L. Nieuwoudt and J.A. Döckel

Management accounting in agriculture - W.M. Seldon and J.A. Groenewald

The agricultural economy of South West Africa - C.P.A. Hanssen

#### Volume 6 No. 1 January 1967

The contribution of the agricultural departments of agricultural development - C. van der Merwe and S.J. du Toit

Trends in land values in South Africa - C.A.G. van Wyk  
The agricultural economic structure of the Transvaal Region - D.J.G. Smith, J.B. de Swardt and C.S. Blignaut

#### **Volume 6 No. 2 April 1967**

Kaffircorn production and the Bantu beer industry - A.P. Scholtz and L.M.D. Vorster  
The marketing of leaf tobacco in South Africa - J.D.R. Henstock  
Financial assistance to farmers in terms of the Agricultural Credit Act, 1966 (No. 28 of 1966) - Department of Agricultural Credit and Land Tenure  
A comprehensive view of and basic approach to agricultural policy - J.B. de Swardt

#### **Volume 6 No. 3 July 1967**

The co-operative bonus - H.C. van Rensburg  
Ostrich farming in South Africa - A.J. Beyleveld  
Some thoughts on the concepts "Operator's earnings" and "Gross profit" - D.J.G. Smith and J.B. de Swardt

#### **Volume 6 No. 4 October 1967**

Recent developments in the dairy industry - D.C. Viljoen  
Export of eggs from South Africa - W.C.J. van Rensburg  
Recent changes in the location factors of South Africa's developing meat processing industry (Part I) - K. Haffert

#### **Volume 7 No. 1 January 1968**

The South African wool reserve price scheme and its administration - J.D.M. MacDonald  
International commodity agreements with special reference to recent developments and further possibilities - H.J.P.L. Kruger  
Recent changes in the location factors of South Africa's developing meat processing industry (Part II) - K. Haffert  
Economic aspects of the use of electricity on farms - F.G. Steyn

#### **Volume 7 No. 2 April 1968**

The general agreement on tariffs and trade and questions pertaining to South African agricultural exports - C. van der Merwe  
The problems of marketing citrus in South Africa - H.C. Papageorge  
The economics of irrigation farming in South Africa - J.K. Siertsema  
The accident fund established in terms of the workmen's Compensation Act, 1941 - O. Grobbelaar

#### **Volume 7 No. 3 July 1968**

Agricultural exports, economic development and the balance of payments in South Africa - S.S. Brand  
The deciduous fruit industry: The probability of Great Britain joining the Common Market and the implications - N.A.B. Bestbier  
Canned fruit: The probable consequences of the United Kingdom joining the European Economic Community - J.B.W. Laas  
A review of the changes in the structure composition and destinations of South African agricultural exports - H.I. Behrmann  
market institution in South Africa - J.B. Bester  
Labour for the production of wine grapes in the Western Province - P.G. Louw  
Planning of minimum costs: A specific reference to the Pongola irrigation settlement - J.L. Olivier and H.I. Behrmann

#### **Volume 7 No. 4 October 1968**

The role of agriculture in the process of community development - S.J. du Plessis  
The importance of the contribution of the agricultural sector to the rate of growth of South African economy - L.W.A. Nel  
The effect of milk yield per cow on efficiency of labour use in dairy parlours - J.D. Graham and J.A. Groenewald

#### **Volume 8 No. 1 January 1969**

Fifty years of progress in agricultural science - D.C.H. Uys  
The marketing of South African edible groundnuts in foreign markets - H.J. Dragt  
Achievements of and challenges to South African agriculture - S.J.J. de Swardt

#### **Volume 8 No. 2 April 1969**

Decentralization of activities - P.S. Rautenbach (AEASA)  
Principles of rural development - P.C. Fourie  
Social and demographic characteristics of rural areas - S.P. Cilliers  
The organisational structure for the planning of national and sub-national development - C.J. Viljoen  
Features of the economic growth and development of rural areas - H.A. Kotzé  
Service areas and rural development - P.J.D. du Toit  
Farm management: A prerequisite for sound agricultural development - H.S. Hattingh

#### **Volume 8 No. 3 July 1969**

An evaluation of the municipal markets as a free

#### **Volume 8 No. 4 October 1969**

- Observations on farm accounting services in Europe  
- H.I. Behrmann  
Efficiency comparisons between milking parlours and  
sheds - J.D. Graham and J.A. Groenewald  
Certain facts regarding the wine industry in South  
Africa - G.J. Wissing  
The demand for apples in South Africa: A statistical  
analysis - J.J. Vosloo and J.A. Groenewald

#### **Volume 9 No. 1 January 1970**

- The development of agriculture in less developed  
areas - O.P.F. Horwood (AEASA)  
Aspects of European research on peasant agriculture  
in Africa - G.M.E. Leistner (AEASA)  
Economic and demographic characteristics of the  
South African Bantu areas - J.J. Stadler  
(AEASA)  
Social factors in the development of agriculture in  
the Bantu areas with special reference to land  
tenure systems - J.S. Murray (AEASA)  
Economic planning of farming units in certain South  
African Bantu areas - J.J.S. Weidemann and  
D.J.G. Smith (AEASA)  
The influence of institutional factors on agricultural  
development in less developed areas - G. van  
de Wall (AEASA)  
Progress with agricultural development in the tribal  
trust areas of Rhodesia - A.F. Hunt (AEASA)  
Agricultural development in South African Bantu  
areas - J.J. van Wyk (AEASA)  
Economic development of tribal agriculture in  
Malawi - P. Brown (AEASA)  
Brief notes on agrarian settlement in Mocambique -  
A.R. Figuiera (AEASA)

#### **Volume 9 No. 2 April 1970**

- Farm records: An aid to better management -  
Editorial  
Subsistence and commercial farming - S.J.J. de  
Swardt  
The marketing of livestock in the North-Eastern  
Cape - P.J.D. du Toit

#### **Volume 9 No. 3 July 1970**

- Application and utilisation of agricultural sector  
accounts - J.P.F. du Toit  
Farmland prices in South Africa, 1939-1966 - H.I.  
Behrmann and B.H. Collett

#### **Volume 9 No. 4 October 1970**

- A production-function analysis to determine  
marginal value products and optimum intensity  
of farms in the Swartland - J.S.G. Joubert and  
W.E. Kassier  
Changes in karakul pelt prices between 1952 and

- 1969 - G.C.J. Kirsten and J.A. Groenewald  
Marketing of South African citrus as a management  
problem - C.M. du Toit  
The demand for food in South Africa - J.A. Döckel  
and J.A. Groenewald

#### **Volume 10 No. 1 January 1971**

- Planning and fulfilment in South African agriculture:  
The ecological approach - J. Phillips  
The state of South African agriculture: A diagnosis -  
J.A. Groenewald  
Micro resource planning and adjustment - J.E.  
Harrison  
Macro resource planning and adjustment - J.A.  
Döckel  
Marketing planning and adjustment in agriculture in  
the seventies - A.P. Scholtz

#### **Volume 10 No. 2 April 1971**

- The measurement of managerial inputs in agriculture  
I: Historical review - J.A. Groenewald and P.J.  
Burger  
The application of programming and game theory  
techniques to farm planning - P.J.M. van  
Maltitz

#### **Volume 10 No. 3 July 1971**

- A review of South Africa's farming industry - F.J.  
van Biljon  
The measurement of managerial inputs in agriculture  
II: A South African concept of agricultural  
progressiveness - P.J. Burger and J.A.  
Groenewald

#### **Volume 10 No. 4 October 1971**

- The measurement of managerial inputs in agriculture  
III: The construction and evaluation of a scale  
- P.J. Burger  
The utilisation of operations research techniques in  
the planning of agricultural undertakings -  
O.D.J. Stuart  
A review of the financing pattern of farmers in the  
four maize production areas of the Republic of  
South Africa - F.G. Steyn and J.A.  
Groenewald  
Trends in economic development in the Eastern  
Transvaal Lowveld - J.P.F. du Toit

#### **Volume 11 No. 1 January 1972**

- Management: Perspectives, aims and approaches -  
A.G. Mueller (AEASA)  
Farm business management: The dynamic approach  
- S.D. Parsons (AEASA)  
The management of research and development -  
S.M. Naude (AEASA)  
Management in marketing - A.J. van der Merwe  
(AEASA)

Managing agricultural extension - C. Murray  
(AEASA)

The prerequisites of agricultural policy management  
- W.E. Kassier (AEASA)

#### Volume 11 No. 2 April 1972

The measurement of managerial inputs in agriculture  
IV: Application with business results - A.A.  
Jansen, G.H. Swanepoel and J.A. Groenewald

The monthly income and cost pattern of farmers in  
four crop farming areas in the summer rainfall  
area of South Africa - F.G. Steyn and J.A.  
Groenewald

Risk and uncertainty in agriculture - W.L.  
Nieuwoudt

A few thoughts on agricultural policy in the light of  
changed conditions - C.S. Blignaut

#### Volume 11 No. 3 July 1972

Factor subsidies and certain policy implications -  
W.L. Nieuwoudt

The effect of resource availability on optimum  
organisation in irrigation farming - H.P.  
Hancke and J.A. Groenewald

Cost-benefits analysis as a method for better public  
investment decision-making - J.A. Döckel

#### Volume 11 No. 4 October 1972

Salient facts of slaughter stock and meat production  
and marketing in South Africa - F.J. van  
Biljon

The meat marketing scheme and abattoir provision -  
*The Meat Industry*

Demand functions for fertiliser in South Africa -  
W.L. Nieuwoudt and H.I. Behrmann

#### Volume 12 No. 1 January 1973

Opening address - H.J. Schoeman (AEASA)

Modern requirements for agricultural economic  
research - J.A. Groenewald (AEASA)

An evaluation of agricultural economic research -  
H.S. Hattingh (AEASA)

Data problems in agricultural economic research -  
W.L. Nieuwoudt (AEASA)

Institutional aspects associated with agricultural  
economic research - H.I. Behrmann (AEASA)

The agricultural economist and interdisciplinary  
research - S.S. Brand (AEASA)

Models in agricultural economic research - P.H.  
Spies (AEASA)

A few personal thoughts - F.R. Tomlinson (AEASA)

Engineering-economic problems - P. de V. Louw  
(AEASA)

Biological-economic problems - J.B. Martin (AEASA)

Application of research results: Diffusion, adoptions  
and perception - S.C. Jacobs (AEASA)

The consumer and his needs - B.K. van der Merwe  
(AEASA)

Marketing policy instruments in the light of small  
markets and low purchasing power of  
Non-whites - F.J. van Eeden (AEASA)

Priorities in agricultural marketing research - I.S.  
Geldenhuys (AEASA)

#### Volume 12 No. 2 April 1973

An application of economic theory in the longterm  
planning of the scale of operation in the  
primary production of wine grapes - H.J.  
Geyer and J. van Niekerk

A review of the quality of management in South  
African agriculture - J.A. Groenewald

#### Volume 12 No. 3 July 1973

Marginal rate of substitution between land and  
fertiliser - W.L. Nieuwoudt

The allocation of land among uses: A theoretical  
view - J.A. Groenewald

The influence of the price of water on certain water  
demand categories - J.A. Döckel

#### Volume 12 No. 4 October 1973

The farm problem, economic development and  
growth, and interdependence of disciplines in  
agriculture - C.S. Blignaut

The maize/meat price gap - W.L. Nieuwoudt

#### Volume 13 No. 1 January 1974

Stability and prosperity in South African agriculture  
- S.J. du Plessis (AEASA)

The technical aspects - B.C. Jansen (AEASA)

The production economic aspects - J.A. Groenewald  
(AEASA)

Controlled agricultural marketing - F.J. van Biljon  
(AEASA)

Needed adjustment in agricultural financing - B.J.  
van Wyk (AEASA)

Comments from a Rhodesian point of view - W.R.  
Robertson and S.D. Parsons (AEASA)

Overall evaluation - H.A. Kotzé and D.J.G. Smith  
(AEASA)

#### Volume 13 No. 2 April 1974

Land tenure systems in White South African  
agriculture I: Historical review - J. Joubert and  
J.A. Groenewald

Beef: International supply and demand - J.G. van  
Driel

#### Volume 13 No. 3 July 1974

Land tenure systems in White South African  
agriculture II: The importance of different  
systems - J. Joubert and J.A. Groenewald

Production costs of crops in the North-Western Free  
State and the factors which influence these  
costs - J.S.G. Joubert and P. Viljoen

Land tenure systems in White South African  
agriculture III: Regional analyses - J. Joubert  
and J.A. Groenewald

**Volume 13 No. 4 October 1974**

- The risk factor in maize production - A. de Villiers  
The possibility of a marketing management approach in South African agriculture - C.M. du Toit  
Land tenure systems in White South African agriculture IV: Legal aspects of leases - J. Joubert and J.A. Groenewald  
Determination of differentiated cover and premium rates for comprehensive crop insurance for maize - A. de Villiers

**Volume 14 No. 1 January 1975**

- Agriculture and functional related industries - P.J. Riekert (AEASA)  
Agricultural development in a dualistic framework - P.H. du Preez (AEASA)  
Principles of resource control and utilisation within the enterprise - S.M. Swart (AEASA)  
Entrepreneurship and the utilisation of labour in agriculture - J.N.S. Hill (AEASA)  
The impact of a changing economic environment on resource use in agriculture - P.H. Spies and B.J. Bester (AEASA)

**Volume 14 No. 2 April 1975**

- Land tenure systems in White South African agriculture V: International comparison and policy implications - J. Joubert and J.A. Groenewald  
Optimum feeding periods and economic criteria in cattle feeding - E.M. Wilson  
Agricultural marketing management under the South African control board system - C.M. du Toit

**Volume 14 No. 3 July 1975**

- Marketing policy instruments within agricultural enterprises - C.M. du Toit  
Thoughts on rural reform and factors which influence the location decision of farmers - C.S. Blignaut  
Economic consequences of plant diseases and pests in commercial crops - J.P. Carstens and J.A. Groenewald

**Volume 14 No. 4 October 1975**

- Socialist enterprise forms in agriculture I: The Soviet Union - T.I. Fényes and J.A. Groenewald  
Socialist enterprise forms in agriculture II: Eastern Europe - T.I. Fényes and J.A. Groenewald  
The world food situation - H.I. Behrmann  
Combining policy instruments in agricultural marketing - C.M. du Toit

**Volume 15 No. 1 January 1976**

- Changes in supply and demand of food commodities in the world market - E.O. Heady (AEASA)  
Institutional changes in world agriculture - W. Thomas (AEASA)

- Future problems with natural resources and their influence on the growth and development of South African agriculture - G. de Wet (AEASA)  
A comparative study of the competitive position of South African agriculture - J.A. Groenewald and J.P.F. du Toit (AEASA)

**Volume 15 No. 2 April 1976**

- Report of the Commission of Inquiry into the Marketing Act (Act no. 59 of 1968): RP 39/1976: Summary and recommendations...

**Volume 15 No. 3 July 1976**

- Expectation models in farm business management - C.J. van Rooyen  
The economic selling weight of pigs - W.L. Nieuwoudt, A.N. Lawrence and M.A. Tarr  
Socialist enterprise forms in agriculture III: Planning and reform in the communist countries - T.I. Fényes and J.A. Groenewald  
Socialist enterprise forms in agriculture IV: Israel - T.I. Fényes and J.A. Groenewald

**Volume 15 No. 4 October 1976**

- An approach for the development of planning standards for a homogeneous farming area (Part I) - M.F. Viljoen  
Optimal production scheduling in pig production - M.D. Nel and J.A. Groenewald  
The effect of the weather on the economic optimum level of fertiliser use - W.L. Nieuwoudt and H.I. Behrmann  
Socialist enterprise forms in agriculture V: The state enterprise as an economic entity - T.I. Fényes and J.A. Groenewald

**Volume 16 No. 1 January 1977**

- The dilemma of the academic - J.A. Groenewald and P.H. Spies (AEASA)  
Methodology in Agricultural Economic training - W.E. Kassier (AEASA)  
Occupations, income and views of Agricultural Economics graduates from the University of Natal - H.I. Behrmann (AEASA)  
Group papers: The view of the employer (AEASA)  
(a) Production economics and management - J.R. Hudson  
(b) Development - D.J.G. Smith and C.S. Blignaut  
(c) Marketing - E. Wolf  
(d) The student's standpoint - P. Viljoen

**Volume 16 No. 2 April 1977**

- The effect of the pigmeat price cycle and feed prices on optimal scheduling in pig production - M.D. Nel and J.A. Groenewald



An approach for the development of planning standards for a homogeneous farming area: (Part II) - M.F. Viljoen  
 Socialist enterprise forms in agriculture VI: Organisational structures in collective enterprises - T.I. Fényes and J.A. Groenewald

#### Volume 16 No. 3 July 1977

Socialist enterprise forms in agriculture VII: Potential application in agriculture in Africa - J.A. Groenewald and T.I. Fényes  
 Management control as a built-in element of agricultural marketing - C.M. du Toit  
 Egg production control - W.J. Treurnicht  
 Seasonal variations in price, production and total income of selected horticultural production - W.L. Nieuwoudt

#### Volume 16 No. 4 October 1977

Valuing of dairy forages according to marginal productivity - P.J.R. Comrie and H.I. Behrmann  
 An approach to farming efficiency analysis as applied in Rûens - P. Viljoen and J.A. Groenewald  
 Beef production systems for the North-Western Transvaal Sweet Bushveld: A simulation model - A. Louw, J.A. Groenewald and J.F.W. Grosskopf

#### Volume 17 No. 1 January 1978

Management indices from cross-sectional production functions: An empirical evaluation - T.J. Martinson and J.A. Groenewald  
 An analysis of the demand for bananas in South Africa - J.P.F. du Toit and J.A. Döckel  
 A statistical analysis of the supply of maize in the Transvaal - D.S. Langley and J.P.F. du Toit

#### Volume 17 No. 2 April 1978

The farm management theme - H.I. Behrmann (AEASA)  
 Farm management information systems as directive for farm management services provided by the Division of Agricultural Production Economics - H.S. Hattingh (AEASA)  
 Farm management from the viewpoint of the practising farmer - H.J. Geyer (AEASA)  
 Organisation and delegation: Managing the entrepreneur's time - S.D. Parsons (AEASA)

#### Volume 17 No. 3 July 1978

Problems and approaches of the labour force on farms - C.L.S. Nyembezi (AEASA)

Mechanisation management: Viewpoints of the research worker - B. van D. Boshoff (AEASA)  
 Financial management as seen by the commercial bank - P.L. Vogel (AEASA)

#### Volume 17 No. 4 October 1978

Investigation into the allocation of bananas to two markets in South Africa - J.P.F. du Toit and J.A. Groenewald  
 A new approach for the planning and development of smallholder irrigation schemes in the Black States of South Africa - A. de Villiers  
 Some recommendations and guide-lines which may lead to more successful agricultural development in Lebowa and other Black homelands (Part I) - D.F. Coetzee

#### Volume 18 No. 1 January 1979

Characteristics of the more successful Black farmer - D.F. Coetzee  
 Some recommendations and guide-lines which may lead to more successful agricultural development in Lebowa and other Black homelands (Part II) - D.F. Coetzee  
 Availability of water and labour as variable resources in planning for optimum organisation in irrigation farming - C.J. van Rooyen

#### Volume 18 No. 2 April 1979

The case for state intervention in agriculture - C.J.P. Cilliers (AEASA)  
 Supply of farm inputs: Cartels or free competition - C.F. le Clus (AEASA)  
 The control board system - W.J. Treurnicht (AEASA)  
 The export of perishable products by air and associated problems - R.M. Gravelét-Blondin (AEASA)

#### Volume 18 No. 3 July 1979

Comments on the problem of creating stability in the maize industry - A.P. Scholtz and F.R. Tomlinson (AEASA)  
 The marketing of red meat in the Republic of South Africa - J.H. Lombard (AEASA)  
 The co-operative field: An overall review - D.J.G. Smith (AEASA)

#### Volume 18 No. 4 October 1979

The role of processors, wholesalers and retailers in the marketing of food in South Africa - G.G. Antrobus  
 Demand for improved quality protein maize in monogastric animal rations - W.L. Nieuwoudt and H.O. Gevers  
 Certain economic aspects of phosphorus fertilising of

maize - T.F. Nienaber and J.A. Groenewald

#### **Volume 19 No. 1 January 1980**

Competitive structure and forms of enterprise in agricultural marketing - C.M. du Toit (AEASA)

Land utilisation, organisation and production in the agriculture of developing areas of South Africa - J.L. van Zyl (AEASA)

The part-time farmer; contribution, problems and future - D.J.G. Smith and W.A. Odendaal (AEASA)

#### **Volume 19 No. 2 April 1980**

Ownership or leasing of agricultural land: Production economic aspects - H.S. Hattingh and A. Herzberg (AEASA)

Business form, strategy and continuity - J.H. Jordaan (AEASA)

Financial control problems of agricultural co-operatives - I.M. van Rooyen (AEASA)

The co-existence of a land market and the community occupation of land - H.I. Behrmann (AEASA)

#### **Volume 19 No. 3 July 1980**

Guide-lines for an agricultural development policy for the new Black States of South Africa within the framework of an integrated rural development strategy - A. de Villiers

Relative efficiency of large and small farming units - H.S. Hattingh

#### **Volume 19 No. 4 October 1980**

Nutritional and dietetic requirements of the individual and society: An agricultural economic perspective - J.A. Groenewald

Business growth in agriculture I: A theoretical approach - A. Louw

Business growth in agriculture II: Description of decision-making model - A. Louw

#### **Volume 20 No. 1 January 1981**

Business growth in agriculture III: The effect of inflation on business growth - A. Louw

The role of management in efficient pig production, with specific reference to personnel practices - L.K. Oosthuizen and E. Janovsky

Intensive feeding of beef - W.L. Nieuwoudt and A.L. Black

#### **Volume 20 No. 2 April 1981**

South-West Africa as an extensive beef producing country - J.M. Laubscher

The market share of primary agricultural co-operatives in the marketing of farming requisites - J.A.H. Davel

Business growth in agriculture IV: Elements of the stochastic model - A. Louw

#### **Volume 20 No. 3 October 1981**

The economics of establishing an intensive pig unit I: The use of static budgeting techniques - G.F. Ortmann

The economics of establishing an intensive pig unit II: The use of discounted cash flow techniques - G.F. Ortmann

Business growth in agriculture V: Riskiness of alternative land acquisition strategies - A. Louw

#### **Volume 21 No. 1 April 1982**

Advertising agricultural products: Yes or no - J.A. Groenewald

The impact of risk and uncertainty in agriculture on the agricultural input industry - C.F. le Clus and J.P.F. du Toit

Government intervention in the dairy industry in perspective - G.R. Backeberg

The development of a dairy feed planning model for dairy cows - W.L. Nieuwoudt and D.W. Durham

#### **Volume 21 No. 2 October 1982**

Agricultural pricing and structural policy I: Macro-aspects of agricultural pricing policy - S.G. Brink

Changes in the parity position of South African agriculture - J.A. Groenewald

Demand analysis of vegetables and subtropical fruit in South Africa - G.F. Ortmann

Optimum organisation on developed irrigation farms in the Malelane-Komatipoort region - I.A. Brotherton and J.A. Groenewald

#### **Volume 22 No. 1 April 1983**

Agricultural pricing and structural policy II: Micro-aspects of agricultural pricing policy - S.G. Brink

Agricultural pricing and structural policy III: Instruments of structural policy - S.G. Brink

Accelerating agricultural development through co-operatives - C. Machethe and J. van Rooyen

Determining depreciation in agriculture under inflationary conditions - S.J.L. Marais

Feed plans for dairy farms in Natal: Results from a linear programming model - W.L. Nieuwoudt and D.W. Durham

Plant sizes and locations in the South African sugar

industry - G.K. Chadwick and W.L. Nieuwoudt

**Volume 22 No. 2 October 1983**

- Structuring of the South African agriculture - S.S. Brand (AGROCON)  
Structuring agriculture within a free market oriented economy in the Western World - R.L. Feltner (AGROCON)  
An opinion survey among Natal vegetable farmers on the marketing of fresh vegetables - I.J. Piccione and W.L. Nieuwoudt  
An economic analysis of demand and supply functions for wheat (bread) in South Africa, 1948-1981 - W.L. Nieuwoudt  
The effects of transport policy on the South African sugar industry - G.K. Chadwick and W.L. Nieuwoudt  
The land resource: A look at recent agricultural rents in South Africa - A. Poray

**Volume 23 No. 1 April 1984**

- The "vertical" subsystems of the "isolated" farm firm I - H. Seuster and L.K. Oosthuizen  
The "horizontal" subsystems of the "isolated" farm firm II - H. Seuster and L.K. Oosthuizen  
Farm-retail price spreads for beef in South Africa - W.L. Nieuwoudt and H.P. Veenstra  
Aspects of labour use in rural Lebowa - T.I. Fényes and J.A. Groenewald  
Farm size and flood damage proneness: Joint effects on cash flow - J. van Zyl and J.A. Groenewald  
Economic aspects of flood damage propensity in agriculture: A study in the Lower Umfolozi Flats - J. van Zyl and J.A. Groenewald

**Volume 23 No. 2 October 1984**

- There is still a rainbow in agriculture - E.L. Butz (AGROCON)  
Possible developments in South African agriculture - A.S. Jacobs (AGROCON)  
The viability of an agricultural crop insurance programme: A policy issue - W.L. Nieuwoudt  
The identification and attitudes of successful and less successful farmers in small holder agriculture in Ciskei - C.J. van Rooyen  
Factors which adversely affect the acceptance of technology in the Amaci area of Kwazulu: Guidelines in formulating a policy - T.E. Kleynhans and M.C. Lyne  
Demand analysis of meat in South Africa - P.J. Hancock, W.L. Nieuwoudt and M.C. Lyne  
The South African beef cattle industry: Its relative importance to agriculture as a whole and recent development in supply and demand - J.M. Laubscher and H.A. Kotzé  
Land prices in South Africa: 1960-1979 - B.D.T. Janse van Rensburg

**Volume 24 No. 1 April 1985**

- Marketing: A look at the future - J.C. Strydom (AEASA)  
Strategic planning: An economic view of the agricultural sector - J.A. Lombard (AEASA)  
Future directions in agriculture: Policy management - S.S. Brand (AEASA)  
Strategic planning and adaptations: Financing - A.S. Jacobs (AEASA)  
Land tenure: Attitudes in Lebowa: T.I. Fényes and J.A. Groenewald  
Marketing behaviour and marketing preferences of Bophuthatswana cattle owners - J.A. Groenewald and J.P.F. du Toit  
The South African agriculture and inflation phenomena - J.A. Groenewald

**Volume 24 No. 2 October 1985**

- A supply and demand analysis of regular Black labour in Natal - E.A. Latt and W.L. Nieuwoudt  
An economic analysis of demand and policies in the beef industry - W.L. Nieuwoudt  
The demand for bananas and the economic effect of supply restriction - J.B. Chadwick and W.L. Nieuwoudt  
Land rents as indicator of profitability in maize and wheat production - W.L. Nieuwoudt and J.J. de Jong  
Estimation of demand and supply functions for fresh and industrial milk in South Africa - C.C. McKenzie and W.L. Nieuwoudt  
An economic analysis of the effects of the fresh milk scheme - C.C. McKenzie and W.L. Nieuwoudt

**Volume 25 No. 1 February 1986**

- A comparison of certain decision-making techniques under risk: An empirical investigation of maize cultivar selection - J. van Zyl and J.A. Groenewald  
Economically optimal maize cultivar selection under conditions of risk - J. van Zyl and J.A. Groenewald  
The determination of differential economic optimum fertilisation levels for different maize cultivars - J. van Zyl, J.M.P. Geerthsen and J.A. Groenewald  
Assessing efficiency in marketing: The case for an analysis of the performance of the South African beef and cattle market opened - J.M. Laubscher  
Supply limitations according to product quality - A.S. Myburgh, J.P. Lombard and M. Sinclair  
An economic evaluation of some crop succession systems under dryland conditions in the Free State Midlands - C.S. Blignaut, J.M. de Jager, J.J. Human and J.A. Grobbelaar

**Volume 25 No. 2 June 1986**

- The role of the agricultural economist in agricultural

- policy - W.L. Nieuwoudt (AEASA)
- The role of the agricultural economist in agricultural development - C.J. van Rooyen (AEASA)
- The role of the agricultural economist in farm management - J.F. Kirsten (AEASA)
- The role of the agricultural economist in advisory services - C. Keevy (AEASA)
- The role of the agricultural economist in agricultural financing - J. Basson (AEASA)
- New directions in food and agricultural policy - J.B. Bullock (AEASA)
- Agricultural commodity price analysis: Policy options for the future - W.L. Nieuwoudt (AEASA)
- Impact of available policy options on consumer welfare - G.F. Ortmann (AEASA)
- Impact of available policy options on trade and macro-economic behaviour - J.A. Döckel (AEASA)
- The performance of past food, agricultural and trade policies: Implications for the future - J.A. Groenewald (AEASA)

#### Volume 25 No. 3 October 1986

- Presidential address - W.L. Nieuwoudt (AEASA)
- Macro-economic policy as a source of agricultural change - L. Tweeten (AEASA)
- Changes in farming and financial management: Implications for the future - A. Louw (AEASA)
- Change in the agricultural political market: Implications for the future - W.E. Kassier (AEASA)
- Is the agricultural-political market efficient? - C.J. Weiers (AEASA)
- Rural development strategies for Southern Africa -

T.J. September (AEASA)

- The competitive position of South African agriculture: An analysis of supply and demand - W.L. Nieuwoudt
- Effect of variable water supply and quality on desirable crop production patterns - J.A. Groenewald and J. van Zyl
- A statistical analysis of the demand for maize in South Africa - J. van Zyl
- The effect of inflation on agricultural production under conditions of risk - J. van Zyl
- Duality and elasticity of substitution I: Theoretical considerations - J. van Zyl
- Duality and elasticity of substitution II: An empirical application - J. van Zyl

#### Volume 26 No. 1 February 1987

- The distribution and financial results and financial ratios among farmers during a period of agricultural setbacks: Grain farmers in Western Transvaal, 1981/82 - B.D.T. Janse van Rensburg and J.A. Groenewald
- The influence of drought and general economic effects on agriculture: A macro-analysis - J. van Zyl, A. van der Vyver and J.A. Groenewald
- The effect of debt burden, interest rates and inflation on the survival of farm enterprises: A case study in the Western Transvaal and the North-Western Transvaal Bushveld - J. van Zyl, A. van der Vyver and C.W. Mostert
- An efficiency comparison between part-time and full-time farmers on the Transvaal Highveld - M. Nel and J.A. Groenewald
- Farm management in South Africa: The state of the art - L.K. Oosthuizen