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# LEVSA NUUS/AEASA NEWS:

## 1990 FR TOMLINSON GEDENKLESING

Die 1990 FR Tomlinson Gedenklesing is op 11 Mei deur Prof. Jan Groenewald van die Universiteit van Pretoria aangebied. Nagenoeg 100 LEVSA lede en hul gades het die luisteryke geleentheid, aangebied deur die Transvaalse Aksiegroep van LEVSA, bygewoon. Die bekendstelling van die spreker en oorhandiging van die ere-penning is gedoen deur Mnr SP van Wyk, erelid van LEVSA. By die geleentheid is die eerste Agrekon, gepubliseer onder die LEVSA vaandel, aan Mnr van Wyk oorhandig deur die President van LEVSA, Prof. Kobus Laubscher.

## BEKENDSTELLING DEUR SP VAN WYK:

Baie dankie vir die uitnodiging om die ere-penning aan Prof Jan Groenewald te oorhandig. Dit is 'n besondere eer. 'n Woord van hartlike gelukwense aan die bestuur van LEVSA met hul dryfkrag en entoesiasme om LEVSA as 'n dinamiese proffesionele organisasie uit te bou. Daar is besondere waardering (en trots!) by my as een van die stigterslede van LEVSA. Ook baie geluk met die "geprivatiseerde" Agrekon en die voorreg om die eerste kopie van die President van LEVSA te kan ontvang. U word net die beste toegewens om hierdie mondstuk van die landbou-ekonoom tot groot hoogtes uit te bou

En nou prof Jan Groenewald. Wat sê 'n mens.

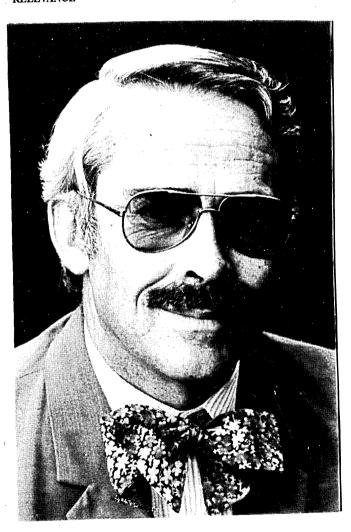
- Miskien eerstens dat ons hier met 'n unieke karakter te make het. Van sy "trade-mark" (veelkleurige) strikdas, sy humor, tot sy indrukwekkende prestasies.
- Jan is 'n goeie leermeester sekerlik een van sy uitstaande kenmerke. Iemand wat sy studente leer om te DINK en te redeneer. Om sy vakgebied in die breë perspektief te sien in teenstelling met die meer enge perspektiewe wat dikwels by sekere dissiplines aangetref word.
- Juis vir voorgenoemde redes ken ons hom as iemand wat dikwels "stroomop" neig hetsy in landbou of landspolitiek. Maar ook daar stimuleer hy denke namate geykte sienings bevraagteken word.
- Sy kollegas in LEVSA het hoë waardering vir sy harde werk, vrugbare pen en akedemiese prestasies. Uit sy pen het meer as 100 publikasies reeds die lig gesien, met nie minder as 64 artikels in Agrekon nie! Sy penne vrugte het ook verder in 'n wye reeks vaktydskrifte verskyn.
- \* Hy is reeds 20 jaar Hoof van die Departement Landbou-Ekonomie aan die Universiteit van Pretoria en het 42 Meesters en 12 Doktorale studente op sy kerfstok.
- Hy het LEVSA se prys vir die beste gepubliseerde artike reeds ses keer verower, die SJJ de Swardt prys vir die beste artikel in Agrekon reeds sewe keer en het in 1989 die Stals-prys vir ekonomie ontvang. Hy is ook 'n erelid van LEVSA.
- Maar vergun my om Jan se gade Heila te bedank en geluk te wens. Sy is 'n interessante karakter in haar eie reg, en ondersteun (en dissiplineer) ons vriend Jan pragtig. Goed gedoen en dankie Heila.

Hierdie ere-penning word toegeken aan 'n lid van LEVSA op grond van sy volgehoue bydrae tot ons vakgebied oor 'n lang tydperk - 'n bydrae wat van hoogstaande gehalte en sigbaar na buite moet wees.

Prof Jan, jy het in uitnemendheid aan hierdie vereistes voldoen en names LEVSA oorhandig ek graag die ere-penning aan jou. Baie hartlik geluk.

## 1990 FR TOMLINSON COMMEMORATIVE LECTURE:

AGRICULTURAL ECONOMICS IN SEARCH OF RELEVANCE



JA Groenewald

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Pretoria

On a personal note, I regard the invitation - and hence the opportunity - to deliver the 1990 FR Tomlinson Commemorative Lecture as indeed a special and unusual honour. I happen to be one of the remaining past students of Professor Tomlinson still to be active - ie not retired. I am also incumbent in a position which he held with distinction for many years, and on

which he has bestowed reflected glory - the headship of the Department of Agricultural Economics at the University of Pretoria. This reflected glory resulted from Professor Tomlinson's clear-cut visions of the agricultural, social and economic scenery, his incisive analytical abilities and his enthusiasm for logical and serious investigation of phenomena concerning the economics of agriculture.

But even more than this, the pride I feel for being invited to deliver tonight's lecture, of being his ex-student and to occupy his academic chair hails from three other considerations: His intellectual integrity and honesty (which brought him in conflict with political heavyweights), his ability to inspire people (including a basically lazy student called Jan Groenewald) and ultimately, his insistence on the use of the human brain for what it was created for - thinking. In this lies, to my mind, his largest contribution. In this manner, Professor Tomlinson has added in a multiplicative fashion to human capital formation. Hopefully some of his past students have, in their turn, been able to transfer this basic tenet to younger agricultural economists and other scientists.

It is in deference to this mentor that tonight I address the issue of relevance for Agricultural Economics.

#### AGRICULTURAL ECONOMICS...

Agricultural Economics, as scientific discipline is, has always been, and will probably always be a discipline covering a gray area - with overlapping domains of the economic, biological, physical and numerical sciences. It shares to a larger or lesser extent with other scientific disciplines the joys of progress, of new horizons and developments. It also shares the ailments of fadism, muddled thought and injudicious application. It has, like other sciences, sometimes become more relevant and sometimes less relevant. These developments have at times been simultaneous. Agricultural Economics should, like other disciplines, adjust itself to new horizons and new limitations as dictated by the society within which it operates. Failure to do so will render it irrelevant, obsolete and redundant.

The practice of science was for centuries regarded as a noble end in itself. Intellectual curiosity was perceived as the most genuine motive for philosophical and scientific contemplation. But thought for the sake of thought is useless. Thought must lead to action (Stern, 1956). It follows that science should logically find its way to some application. This presents an ethical dimension: a problem of values to both scientist and community. Society can gain or loose by applying science. Wisdom is required. Science should be used to develop technologies, institutions and conditions that will rid man of his demoralizing fears. A person may be called wise if he:

- (a) Possesses the knowledge and goodwill for a better understanding of his own self an his fellow; and
- (b) possesses a good sense for a proper order of rank of the various values and human issues, duties and responsibilities (Thirring, 1956).

Production and consumption of agricultural goods are in turmoil. The commercial agricultural sector in South Africa - as in some other countries in the Western world - is in its gravest economic and financial crisis since the Great Depression of the Early Thirties. South Africa's subsistence agricultural sector, in common with much of Africa, is plagued by overpopulation of humans and animals, stagnant underproduction, low productivity, negative motivation and abject poverty. While some groups of consumers are well off, other suffer from food shortages - not because there is not enough food, but rather because they cannot afford it.

In a world with unstable, depressed and turbulent agricultural markets, South Africa has shed much of its competitiveness.

Some problems stem from injudicious managerial actions by farmers, suppliers of inputs and suppliers of marketing services. Some stem from exogenous elements on world markets. Some stem from foolish government policies which, besides their own direct effects - eg. on markets - have contributed to, and also aggravated results of poor managerial action.

If it would be argued that many of the policy actions were taken in defiance of, or without consultations with agricultural economists, the profession would find this argument to be comforting and convenient. It would also be true. If, however, it was argued that agricultural economists concurred with, cooperated in and instigated the most foolish of these foolish policies, the accusation will be as true but not as comforting or convenient to the profession. This would also apply to misguided attempts at social/economic engineering.

We have to consider ourselves against this background.

### AGRICULTURAL ECONOMICS AND RESEARCH...

While it would be false to aver that Agricultural Economics has not made progress and has not made positive contributions to society over the last few decades, it would simultaneously be erroneous to say all is well.

It is relevant to briefly review the origins of Agricultural Economics. Its early developments came from both economic and agricultural/biological/natural sciences (Groenewald and Spies, 1977).

Agricultural Economics, more than most other economic disciplines, made its reputation as an empirical science (Bonnen, 1988). Its main aims were to solve economic problems concerning the production and distribution of farm products. This is where originally, the main research emphasis was placed.

Research and knowledge can conveniently be classified into three main groups (Bonnen, 1986 & 1988; Johnson, 1986):

- Basic research disciplinary knowledge involves the theory, empirical measurements and measurement techniques needed to explain fundamental phenomena in a discipline.
- 2. Applied research subject matter knowledge uses concepts of basic or disciplinary knowledge for the use of a set of decision makers facing a common set of problems. To Society at large, this increases the usefulness of knowledge. Disciplinary knowledge in itself cannot be directly utilized by Society to solve problems. Subject matter knowledge is normally at least partially multi-disciplinary, but rarely facilitates decisions directly.
- Problem solving knowledge also involving applied 3. research - is necessary for the latter purpose. This is relevant for decision-making. It often involves two types of research: Adaptive and maintenance research. New technologies (institutional, chemical, biological, social, mechanical, etc) have to be adapted to local circumstances (natural, economic and social) in order to increase productive capacity. Since higher productive capacity disturbs and changes ecosystems, maintenance research is needed to defend both productivity and ecosystems (Bonnen, 1986). As scientific knowledge, and with it, productivity grows, an increasing portion of research and development effort should go into maintenance research (Ruttan, 1982; Bonnen, 1986).

Relationships concerning knowledge transfers among these research areas are complex. For optimal use of scientific endeavour, research must be concentrated on problems important to society.

This has some important consequences, and tends to point at deficiencies in the reigning directions of scientific research in South Africa, including also Agricultural Economics.

There has, in the first instance, over the last few years developed a misplaced emphasis on so-called "fundamental" or basic research at the expense of applied research. A mode of thought has taken charge of many research institutions that excellence in science is the be-all, and that such excellence cannot be achieved in anything other than basic research. Such an attitude is pure, basic snobbery and certainly not in the public interest. It should be borne in mind that South Africa is a comparatively small country. The smaller countries - particularly those with a lower all-over level of development - should, in order to effectively improve productive capacity, devote comparatively more of their research resources to adaptive research than large, wealthy countries (Ruttan, 1982).

Agricultural research policy has taken a wrong turn in yet at least one other sense. Applied research - be it subject matter, adaptive or maintenance research - is essentially of a multidisciplinary nature. If the broad agricultural and consumer communities in South Africa are to be effectively served, the necessary applied research will almost invariably have to involve a combination of natural, biological, engineering, economic and social sciences. To the extent that the fairly newly envisaged Agricultural Research Council will separate the other agricultural sciences from Agricultural Economics and Agrarian Extension Science, will the relevance of research in all disciplines (including Agricultural Economics) increasingly be reduced.

### AGRICULTURAL ECONOMICS AND DATA...

Agricultural Economics did - as stated before - make its mark as an empirical discipline. As stated by Bonnen (1988), the profession's reputation is based on three foundations: Theory, statistical measurement techniques and data.

Now - as in the USA (Bonnen, 1988) - a situation has arisen that some agricultural economists regard data as unimportant. This is partially due to the time and costs involved in collecting primary data from farmers, consumers and traders. To some extent though, the same academic or scientific snobbery referred to earlier has also led agricultural economists astray. Mathematical refinement of models, statistical or econometric elegance and the peer adoration sometimes accompanying this, has given an aura of excellence around refined manipulation of poor data - a situation also pervading the profession elsewhere (Bonnen, 1988).

The drift toward manipulation of unsuitable, insufficient or obsolete data with increasingly sophisticated statistical models - in an effort to disguise data weaknesses - is in danger of rendering our profession irrelevant. We must remember the adage of "Garbage in, Garbage out". There is no escape while we feed garbage into models.

The reduced effort on data collection and the simultaneously increased intensity or model manipulation have unquestionably been stimulated by continuing developments in computer capabilities. We are in danger also of substituting computation for thought - a process warned against 17 years ago by the man whom this lecture commemorates tonight (Tomlinson, 1973).

## AGRICULTURAL ECONOMICS AND EQUITY...

South African agricultural economists - in common with people involved in other economic and other agricultural sciences - have over the last few decades devoted all their attention to matters supposedly pertaining to efficiency with hardly a thought on equity. This has probably been the case also with most other social sciences.

At the same time, South Africa was involved with economic/social engineering, a process which is now at a stage of demolition. This engineering process can be shown to be inefficient. In as much as that rent seeking obviously played an important role in apartheid can it be demonstrated that it also was inequitable. We also have other reasons to regard it as inequitable. But inequitability cannot yet be nearly as readily measured as inefficiency. As pointed out by Atkinson (1975), measurements of inequality in economic welfare are inundated with perceptual problems. Measurement of equity will ob-But an inability to viously present even larger problems. measure something does not deny its existence. Inability to measure equity and equality has probably stemmed, partially at least, from a lack of interest until quite recently among economists, including agricultural economists. Over a period of 10 years, only approximately 6 per cent of all articles in the American Economic Review and the Economic Journal dealt with distributional questions in any form whatsoever (Atkinson,

This is partially an outflow of a deficiency in the economic and agricultural sciences - the unwillingness to study human value systems and to adjust research endeavours accordingly. We are, as stated by Johnson (1986), still in a situation of being unable to define "good" and "bad" even though we can experience it. But until more is known about his, a pragmatic approach is indicated. We cannot blithely carry on to maximize profits and/or yields to the exclusion of distributions.

The deficiency in ethical knowledge - "good " and "bad" - underscores a phenomenon, already remarked upon more than three decades ago, that economists are not economic in the sense of borrowing from other social and human sciences (Boulding, 1958). This is a serious deficiency. Social sciences are sparsely represented in agricultural sciences, and agricultural economists should increase their knowledge and skills in these. This will aid in relevance. The aspirations and problems of people - wealthy and poor - are not necessarily primarily of an economic and/or biological nature.

### SOUTH AFRICA IN THE 1990's....

In conclusion, we have to look at South Africa in the 1990's. Old mistakes need correction. Some old attitudes and perceptions need alteration if chaos is to be prevented. New structures have to be built.

In this process, distributions will have to change. Inequitabilities have to be reduced drastically. Analyses have to be done, followed by decisions and action.

The agricultural challenge is a many-sided one. It involves rehabilitation of commercial agriculture. It involves modernization of traditional agriculture. It involves people. It involves markets. It involves institutions. It involves resources. It involves consumers.

Dangers of resource degradation and of environmental pollution have to be faced at a time with a big need to improve material living standards. I am convinced that the agricultural economist has a role to play in this regard. He will have to sharpen his existing tools and acquire some new ones. He will have to be - depending on his particular interest - a problem solver, a subject matter researcher, or (please, in smaller numbers) a disciplinary researcher. He must be willing to cooperate with other scientists. He must be willing to gather data before applying models.

The agricultural economist will have to be realistic. He must realise that single, determinate, unique optima will be inappropriate wherever prevailing conditions do not favour those convenient assumptions that lead to these optima.

He will have to discard the type of academic and scientific insulation or snobbery which leads to a dogmatic predilection for determinate solutions (Van Zyl,1989), to an exaggerated quest for fundamental research and scientific elegance and which keeps him away from data gathering chores and from real problems. He must find his problems in the real world.

The agricultural economist must take more cognicanze of value. He must consider equity together with efficiency.

If he can succeed in this, his relevance will be beyond question. Success will improve not only his relevance, but also his whole standing in the community at large and eventually, perhaps, also in the ivory towers.

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