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## DINNER SPEECH

### UNIVERSITY EDUCATION IN AGRICULTURE: CHALLENGES IN SOUTH AFRICA

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A month ago *The Sunday Times of London* reported that a new group of Ivy League universities has developed in Britain. As in the past, the list is still topped by Oxford and Cambridge, but now also includes universities not previously regarded as "elite" institutions. According to the report, the ability of a university to attract research funds is the key to success. The new top universities in the United Kingdom have been highly successful in targeting the private sector for funds to strengthen their research.

#### WHAT HAS BEEN HAPPENING IN SOUTH AFRICA?

To put it mildly, tertiary education in our country is facing interesting times. In October 1996 the National Commission on Higher Education published the document *A Framework for Transformation*. The *Green Paper on Higher Education Transformation* appeared two months later in December 1996. We now await the arrival of the White Paper. It is clear that transformation of the South African higher education sector will be extensive. I do not intend to speculate on the impending legislation and the general transformation of the university system: instead, I shall focus very briefly on challenges and opportunities within the vague boundaries of agricultural sciences. (Incidentally, like many other people in South Africa, I prefer the word "challenge" to "problem" with its negative connotation!):

1. South Africa has probably reached a saturation point with regard to the number of university faculties of agriculture. Effective training in agriculture at university level is notoriously expensive: an experimental farm can easily become a major drain on a university's beleaguered budget. Furthermore, once a faculty has been established, it becomes a traumatic exercise to close it down at a later stage. We should certainly not think of adding new faculties.
2. We need to make a clear distinction between

the functions of a university faculty of agriculture and those of a college of agriculture. If this is not done, employers in the agricultural industry might unwittingly appoint the wrong people in certain positions. Faculties and colleges should not in any way be in competition: ideally, there should be synergism between these two types of institutions.

3. The different universities within Southern Africa offering degrees in agriculture must communicate with each other. Previously we had very little formal contact between faculties. However, the South African Deans of Agriculture now meet at least once a year to discuss matters of mutual interest. Apart from this national meeting, the Deans of Agriculture from the 12 countries of the Southern African Development Community (SADC) also meet annually. (South Africa joined SADC when our country became a recognised democracy.) We now have the ideal opportunity of developing an effective network between the different faculties of agriculture on our subcontinent.
4. Funding of faculties of agriculture is a complex and often sensitive matter. Within most SADC countries outside South Africa, these faculties relied heavily on international funding agencies to support research and the operation of post-graduate programmes. Much of this support is being withdrawn and South African universities could well be training more postgraduate students from neighbouring countries than in the past. Large companies doing business throughout Africa are likely to be approached in the respective countries to provide scholarships for these students. Ideally, many of these students would later be joining their sponsoring companies.
5. South African faculties of agriculture should all be concerned about succession of senior staff within their departments. There is a critical shortage of adequately qualified people in several disciplines. In this regard I might stress

Agronomy, Soil Science and Animal Sciences. We need to train more postgraduate students in these fields. Provision should also be made to let promising students enter PhD programmes at reputable universities abroad.

6. Why are our faculties losing key academics?

The answer is simple: we cannot compete with the salaries being paid by industry. In addition, cutbacks of state contributions have a negative effect on staff morale. Within agricultural sciences, every effort should be made to retain productive key personnel. This cannot be achieved by universities on their own: we need the support of industry to establish stable surroundings. I can cite one excellent example at the University of Stellenbosch. Thanks to generous funding from the wine industry, an Institute for Wine Biotechnology has been established. The institute has been staffed with first-rate scientists and will certainly bolster the competitiveness of a large and important industry. We need more direct links of this nature between industry and universities. These symbiotic relationships serve the interests of both partners.

7. University "ivory towers" operating in aloof isolation cannot be justified or maintained. Universities are part and parcel of a larger society and have an obligation to serve their respective constituencies. Faculties of agriculture will have to adapt to the changing scene. I can briefly mention some of the issues that will receive more attention in future:

- the development of bridging and academic

development programmes to ensure that all students with potential can gain access to universities;

- the provision of broad-based, part-time further degree programmes targeting employees who have already established their careers;
- the greater use of electronic media in teaching programmes;
- the establishment or consolidation of networks at provincial, national, broad regional and international levels. In this regard agricultural institutions within the Western Cape are extremely fortunate: we have a well-organised provincial Department of Agriculture and two excellent institutes of the Agricultural Research Council (Nietvoorbij and Infruitec). The network linking the University of Stellenbosch, the Department of Agriculture: Western Cape, Elsenburg College of Agriculture, Nietvoorbij, Infruitec and the broad agricultural industry is excellent, yet still expanding.
- finally, the establishment of university consortiums seems certain. A consortium can, for example, share library facilities, laboratory equipment and teaching responsibilities. These timely steps could lead to substantial savings.

In conclusion, I would like to stress that I am optimistic about the future of agricultural training and research in South Africa. To use a favoured cliché: agriculture is simply too important to be ignored by those in power!