

Foreword to Annual Report 2000/2001

James E. Godfrey, Chairman of the Governing Body

Last year, I commented on the reasons for research. This year, I want to consider the measurement of research output whether funded by government, research foundations or the private sector. There is no clear-cut single measure; a scientist may perceive and quantify success differently from government and commercial companies. Research should deliver end results, which are measurable and satisfy the needs and requirements of society as a whole, and of the different parts of society whether they be consumers, taxpayers, government, company shareholders or scientists, all of whom may have different views and expectations of research deliverables.

For this analysis, research needs to be dis-aggregated into various parts. In the government sector, policy, public good, food safety (balance of risk assessment), health, wealth creation and poverty reduction and environmental issues, which include amenity pollution and natural resource management, are high priorities. In the private sector, food and industrial output, the financial value of contracts, the profit to a production chain within a marketing cycle, and the efficient use of resources are important factors. For the research centre and scientist, specific measurements of number of research papers published (weighted to journal ratings) per research scientist and total staff, similarly cost of research per scientist and per total staff at a centre, need to be considered. There are, however, implicit conflicts for scientists who have been successful in gaining private sector research contracts, for these may require confidentiality clauses to allow lead time for commercial gain before publication and wider uptake of results. These issues need to be considered and balanced against the recognition, esteem and wealth-creating potential of innovative, commercially sponsored research. A dynamic research organisation such as SCRI must continue to diversify its portfolio of externally funded research, mindful of the differing pressures that this places on its staff.

For society as a whole to attain ever-higher standards of living, we need to create wealth in a sustainable way both in this and future generations. In its simplest

form, in a free market economy, price will determine the goods and services which are most highly valued. This will be subject to large distortions when markets are exposed to external interference such as taxation, legislation and trade tariffs. However, when environmental aspects are considered, traditional economic analysis is often inadequate since it often fails to take into account the importance of public good and other externalities in calculations of wealth creation.

When research output is measured, then this poses the question of how research strategy and the appropriate criteria for the commissioning of research are set. In developing criteria for the commissioning of research, careful consideration must be given to ensure that adequate controls are in place. However, these procedures should not stifle innovative research and should be streamlined to minimise bureaucracy. It is often easy for government to justify policy research without overt measurable outputs; in such cases, to ensure high quality work and value for money, this should be accompanied by some form of independent evaluation such as international peer group review. If a research centre is too heavily dependent and focused on policy research, then it may lead to a lack of innovative wealth-creating research and drive to gain commercial contracts. In a period of economic restraint in the public sector, there must be a drive to create intellectual property and offer tangible returns to the sponsor, public or private. Another conflict arises between funding and measurement of outputs arising from research giving rapid but sometimes difficult to quantify benefits, perceived or otherwise, and those types of research with more distant though possibly greater long-term benefits.

We at SCRI can hold our heads up high and be proud of our record of achievements over many years. Our success, when measured against criteria such as commercial, financial and output per scientist, is outstanding. This has been achieved by the hard work of all at SCRI. Our collaborations locally, nationally and worldwide continue to flourish. The commercial environment in which we operate is changing with

company takeovers and amalgamations affecting our customer base. In this past year, I am pleased to report that our commercial activities through Mylnefield Research Services continue to be successful at a time of cutbacks in research programmes in the private sector associated with agriculture and food. I thank our commercial director, Nigel Kerby, and all his staff for their commitment and dedication in achieving this result.

Six new members were appointed to the Governing Body in April 2000; they have all contributed to and complimented the skill base and experience of the Governing Body. It has been gratifying to see the increasingly beneficial interaction between the Governing Body and senior staff over the last few years and I am sure that this aids the efficient and successful running of the Institute. Our Director, Professor John Hillman has been as dynamic as ever and I pay tribute to his vision and energy which drives SCRI forward.