

2001 Research Assessment Exercise

Overview for Unit of Assessment 15: Agriculture

Seventeen institutions submitted to the Agriculture Unit of Assessment. Of these, ten submitted between 30 and 80 active researchers; the remaining seven between 5 and 13 researchers. Of the large submissions, although there was some disciplinary concentration (e.g. aquaculture, forestry), the majority were substantially cross-disciplinary in nature.

Agricultural research in the University sector is therefore concentrated in a relatively small number of institutions, which are geographically dispersed throughout the United Kingdom, and most of which are willing to allocate substantial resources to this area. The Panel was supportive of this development. Much of the research assessed demands expensive facilities and is resource-intensive, particularly with the growing emphasis on research in fundamental science, and with reduced funding routes for holistic, applied science.

In virtually all the large submissions, the Panel found significant quantities of research which it regarded as of international excellence. In many cases, however, it also assessed parts of the submitted output to be of less than national quality. The balance between international and sub-national output was a major influence on the research grade awarded.

With respect to those UK institutions which have traditionally concentrated on agriculturally-related teaching, but which now aspire to significant research performance, only modest success in RAE terms has been achieved. Nevertheless, they clearly contribute as academic centres for local and national discussion fora and study investigations. The Panel regards such activity, informed by research developments at these institutions, as of scientific, economic and political importance, particularly when public interest in agriculture is currently under intense scrutiny.

The Panel found that the most impressive research emanated from institutions which had strong fundamental biology schools. In some areas of underlying agricultural science (including molecular science) there is clear evidence of health, vigour and imagination. This was particularly the case in plant sciences. In livestock sciences, there appears to be less linkage between fundamental developments at the molecular level or with organism/population functions. The Panel recognised that this may reflect technical difficulties, cost and ethical issues, but would nevertheless encourage greater cohesion between molecular and holistic science in the livestock sector.

Agricultural research in the UK remains of high quality, relevant to end-users and integrated with other disciplines. This includes traditional areas such as production agriculture, including animal science and nutrition, agronomy, plant pathology and physiology, as well as the socio-economic and environmental implications of agriculture, the rural economy and consumer concerns over, for example, food quality and animal welfare. A substantial proportion of submitted research output fell into this category, but the Panel observed some variation in the quality of this research. To some extent, this may be due to the specific requirements of the customer body, and the panel recognises the importance of such work. It therefore encourages institutions to continue to develop these areas, while attempting to improve the overall quality of the work undertaken.

The University sector is of course not the only supplier of agriculture research and the Panel believes there could be more effective collaboration and co-funding with Government-funded Research Institutes than currently seems to be the case. Overall, though, the Panel believes that the University sector is making a substantial and creditable contribution to the advancement of knowledge and to the economic and social needs of both the UK agriculture industry and the wider community.