

Lessons from BSE for public confidence

The scare in Britain over infections across species by prions was badly handled. Whether the research community can do more to prevent future public crises of confidence needs to be examined in the light of the past influence of interested parties.

LAST week's spectacular collapse of public confidence in British beef (see page 273) was triggered in a scandalous fashion. The announcement by a British government minister that a new strain of the human prion disorder, Creutzfeldt–Jacob disease, had been identified and that there is circumstantial evidence of association with past consumption of beef affected by bovine spongiform encephalopathy, was fair enough. But for the evidence to be unavailable at the time of the announcement maximized the scope for public alarm and bans by other governments. The scandal is that the panic was foreseeable, as was the need to have in place the scientific advice on probable risks that in fact only followed several days later. The original evidence remains unpublished.

One reason for the delayed publication was said to be the need for independent review of the evidence. That is indeed necessary before public exposure and, whatever their expertise, the advisory committees involved are too close to the government to be seen as independent referees. But external review can be conducted within a day or two in exceptional circumstances.

Just as questionable was the attempt by the government to suggest that responsibility for advice to the public lay with its scientific advisers. But it is the government that must first assure itself of the quality of the advice it receives on scientific knowledge and its limits, and then to guide the public on the basis of that advice while also considering its wider implications.

Following the initial announcements, journalists seeking more information found that the scientists involved had suddenly vanished. It is well known that British agriculture ministry scientists are tightly constrained in what they can tell the outside world (however formally) even in the best of circumstances. Here, however, their invisibility, and that of others within the advisory system, was appropriate. It is a well justified principle that researchers should not comment on results until the latter are publicly accessible, especially when, as here, an unguarded statement can lead to extraordinary damage and potential legal liabilities.

A government (and indeed a country) impaled on a pitchfork of scientific uncertainty is thankfully an uncommon sight. But in the longer term other public scares can be envisaged in the growing use of agricultural biotechnology — and enhanced in their potential impact by the loss of government credibility in last week's events. This is where the public's perception of risk may bite once again. In generating public confidence, statements of quantified risk can be essential. In the current situation that is impossible without more epidemiological evidence, more research on species barriers, or a much better understanding of mechanisms.

Prion research will now be strengthened. But funding agencies need to ask whether their programmes are sufficiently aggressive in tackling other uncertainties that may fuel public disquiet in the future. The United Kingdom's technology foresight exercise last year included examination of agriculture and, separately, the food industry. Rightly, that process has fed into research funding policy. But in both cases, the process was dominated by scientists, industrialists and civil servants — a similar grouping to that accused, by its past role within government regulation of agriculture, of giving too little attention to health risks and too much to the needs of farmers and commerce. Has enough been heard from those more critically minded in the interests of public health?

In its regulation of agriculture, the government (and those in other countries where suppliers' interests weigh heavily) should in future lay the burden of proof more on suppliers than on consumers. In that context, the closeted activities of the UK's Ministry of Agriculture, Fisheries and Food — indeed, its continued existence in its present form — may, after critical examination, turn out to be a scandal as great as any other. □

Through the budget fog

A projected catastrophe for science in the United States undermines government credibility

PRESIDENT Clinton's 1997 budget is a cautious document, which implicitly acknowledges the brevity of its own shelf life: there are no grand schemes here, since the president knows that the Congress would simply ignore them. The budget does, however, offer a partial answer to a major science policy question which the White House has been reluctant to answer. If non-military research and development spending falls by a third under the Republican plan to balance the budget by 2002, as is widely believed, what happens to R&D under Clinton's plan to do the same?

The bad news is that it will not fare much better. The science, space and technology line in Clinton's budget — which includes the National Aeronautical and Space Administration, the National Science Foundation, and some energy department research — would fall precipitously from \$17.9 billion next year to \$14.6 billion in the year 2000, before recovering somewhat. That's a real cut of more than a quarter, and almost a billion dollars less than the Republican proposal.

For health research and training — the National Institutes of Health, broadly speaking — Clinton would raise spending from \$12.6 billion next year to \$12.9 billion in 2000: a 7% cut, when inflation is taken into account. This figure is higher than that envisaged in the Republican plan — but that plan is out of date, and Congress is, for the second year running, seeking more money for NIH than the administration has offered (see news, page 277).

The Clinton administration and the Republican Congress, while holding substantially different positions on such items as technology and environmental research, are basically united in their professed intent of hammering science spending in order to balance the budget. So it is wrong for Al Gore, the vice president, to say — as he did last month — that Republican plans for science spending will lead to Japan surpassing the US in non-military science spending “at the turn of the century” while the administration has “a very sensible plan” to prevent this from happening. It has nothing of the kind.

If the United States moves to balance its budget without tackling the areas where it actually spends three-quarters of the money — defence and mandatory health and social security programmes — then science spending will indeed be crushed, along with much else of value that the federal government does. The best that can be said for Clinton is that he is even less sincere about doing this than is the Congress. □