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Poor planning threatens centres of excellence

A proposal to convert some of Japan's best basic research institutes into autonomous agencies is fine in principle but could be disastrous without far more thought about the nature of their activities.

Japanese scientists are at last actively entering the debate over the government's controversial reform plan, which targets not only ailing government organizations but also some of Japan's best basic research institutes for conversion to agency status (see page 272). This status would give them independence in management but require them to have their performance evaluated by external assessment bodies.

This publication has long advocated giving greater autonomy and responsibility to the institutions administered by Japan's Ministry of Education, Science, Sports and Culture (Monbusho), including universities and the institutes for joint university use. An independent management system would allow increased flexibility in funding. Furthermore, without the restrictions imposed by the civil service law, researchers would be free to carry out entrepreneurial activities, such as setting up venture businesses and carrying out joint research with private companies.

The government's reform plan moves in this direction but, as it stands, its flaws are far more obvious than its potential benefits. Opposition to reform of the universities has succeeded in delaying further changes until at least 2003, giving time for the fundamental reshaping required. Many fundamental steps need to be taken, such as implementation of a national external review system and of competent new administration, before universities will be ready for agency status. But other institutions would face more immediate problems if the current proposals are implemented.

The reform plan, which is part of the government's drive to improve the country's administration across the board, has met strong opposition from the outset, with targeted institutes arguing against the government's claim that the changes are necessary to run them more efficiently. Such resistance is hardly surprising given the plan's rationalization targets and cost-cutting measures. The government has also made clear its intention to close down, merge or privatize institutes that fail to meet their performance-related targets. But, following compromises by the government with stronger ministries over its plan to reduce the number of civil servants by 25 per cent, there is disproportionate pressure on research institutes to cut their costs.

As a result, the National Research Institutes for Joint University Use are at risk; they include the Institute of Space and Astronautical Sciences, the National Astronomical Observatory, the National Institute of Genetics and the High Energy Accelerator Research Organization, which are all renowned for the quality of their basic research. More thought must be given to decisions concerning such high-quality institutes, whose activities are ill-suited to targets based on cost performance. The government should create a separate agency plan for institutes carrying out basic research, so that appropriate evaluation systems and performance-related targets can be introduced, with goals and support established over periods of 5–10 years, reflecting the long-term character of fundamental research.

Scientists have been slow to respond to the government's proposals. Partly to blame is the lack of communication between the government and the researchers, but the main reason lies in the fact that the scientific community have very few 'advocates' to represent their opinions. If Japan is to create world-class 'centres of excellence', as stressed in the government's 5-year plan for science and technology, the requirements of basic research institutes must not be overlooked for the sake of a flawed reform plan, while the scientific community needs urgently to develop stronger advocacy. □

Don't ignore dual careers

The dangers of doing so are all too vivid in the physics community.

Why are only 6 per cent of US physicists female? And why is women's progress into the upper echelons of the hard sciences so painfully slow? A survey due to be presented this week at the American Physical Society's annual meeting reveals that being part of a dual-career couple can form a critical barrier to the progression of the small number of women working in physics (see page 273).

Many more women physicists than men are married to other physicists, so are in the complicated position of having to search for a job with a physicist spouse. Worryingly, the survey finds that dual-career couples working in science are put in a worse situation by what is described as "institutional ignorance", "bureaucratic inertia" and what can be summed up as plainly sexist ideas about the role of women in dual-career couples. We should not be overly surprised at this — witness, for example, a recent report from the Massachusetts Institute of Technology that women faculty are systematically rewarded less for professional accomplishments than their male colleagues.

The problems faced by dual-career couples — in any profession — pose a challenge for institutions. If the small numbers of female physicists are to be retained, their employers need to stop ignoring the issue or even making things worse. Most institutions have been slow to identify and deal with the obstacles to employing dual-career couples, yet there are a number of tried and tested ways they could adopt — for example, offering shared or split positions, or running spousal hiring programmes. As the survey shows, these ideas have already been successfully put into practice at a few US higher-education institutions.

With increasing numbers of women taking up scientific careers, the number of dual-career couples in science is likely to continue to grow. Institutions have no option but to face that phenomenon and adapt. □