

Singh shifts India towards nationalism

- Emphasis on technological self-reliance
- Parliament may be split on nuclear policy

New Delhi

THE National Front government led by Vishwanath Pratap Singh, which came to power in India after the November election, intends "substantially" to strengthen research and development and place a strong emphasis on self-reliance in science and technology. Important changes in research priorities and technology import policy are likely.

The National Front is an alliance of five parties that came together before the elections with the main objective of bringing down the Congress government headed by Rajiv Gandhi. Although a minority in the parliament, the front has been assured of support by the right-wing Bharatiya Janata Party and the communists. The approach to science and technology will therefore have to try to reflect the various aspirations of the right, the centre and the left. For the time being Prime Minister Singh, a physicist by training, has himself taken charge of the Ministry of Science and Technology and the Departments of Atomic Energy, Space, Electronics and Ocean Development. A science minister is expected to be inducted into the cabinet later.

The new government professes to be more nationalistic than that of Gandhi and stresses research and development that will make an impact on the quality of life in the villages where 80 per cent of Indians still live. If the government is serious in implementing its election manifesto, a shift from sophisticated to more mundane research is likely. This is consistent with the its decision to divert half of the country's financial resources to the development of rural India. Harnessing non-conventional and renewable sources of energy has been declared as the government's major objective.

The existing liberal import policy may be revised to ensure protection to indigenous technologies which the new government believes is necessary to provide a strong base for self-reliance. According to its manifesto, technology imports will be cut down and work at national laboratories will be directed towards import substitution. Multi-nationals may once again find India a tough market. Singh's cabinet includes a former minister from the post-emergency non-Congress government which banished IBM and Coca Cola from India. The government manifesto blames Gandhi for allocating resources to "indiscriminate automation and thoughtless computerization", which it claims

has displaced labour and increased the country's dependence on foreign capital.

The government's view is that Gandhi wanted to "leapfrog to the twenty-first century", but the new policy is to go "step by step".

On science matters, the front government may be influenced by its ally, the Bharatiya Janata Party, which has 90 members in the Parliament. The party has vowed to use science in the service of the poor and "develop technologies with a human face". It wants to put new life into national laboratories and direct them to develop appropriate technologies for the masses. The party supports measures to stem the brain drain, increase publication

FRENCH RESEARCH

Universities get a little help

Paris

FRENCH education minister Lionel Jospin has announced a new plan to boost university science research. He intends to create a new National University Institute of Advanced Scientific Studies (Institut National des Hautes Etudes Scientifiques de la Recherche Universitaire) to give leading professors as well as young scientists the time and facilities to carry out high-level research.

But no new funds are likely to be set aside for the institute, meaning it will not exist as bricks and mortar. The idea is to create 60 'senior chairs', at a rate of 15 per year, and 30 'junior chairs'. The senior chairs, which will be for ten years, aim to give university scientists "of renown" better facilities within their own departments and some relief from teaching. New lectureships will be created to take over part of their teaching load. In addition, about 20 one-year visiting professorships will be created for foreign scientists.

The plan will help tilt the research balance towards the universities. At present most research is carried out in the *grandes organismes*, notably the CNRS (National Science Research Centre) and INSERM (National Health and Medical Research Institute). Although their laboratories are often near university campuses, researchers do little teaching.

University professors are encouraged to carry out research but unless they are associated (through grants) with CNRS or INSERM, they are not likely to enjoy the same opportunities as full-time researchers.

of scientific literature in regional languages, establish a network of centres for application of science and technology in rural areas and boost research in indigenous systems of medicine.

The National Front may go along with its ally on these matters but on nuclear policy their ideas differ. The National Front would like to continue the existing policy of keeping the options open, but the Bharatiya Janata Party wants "optimum defence preparedness including production of nuclear bombs and delivery systems". It is not clear whether Singh would retain or replace the current science adviser, Professor M. G. K. Menon. Menon had been playing a key role in formulating science plans as a member of the planning commission having been made science adviser, by Gandhi in 1985. He was not available to comment on his role in the new government.

There is no indication whether the scientific advisory committee created by Gandhi will continue or be wound up.

K. S. Jayaraman

The proposal to boost university research comes as education and research are being given high priority by the government. But so far this has been translated only into more money for the CNRS and INSERM, slightly better salaries for university staff and a promise to build new universities.

Peter Coles

Squeeze provokes strike

Paris

THERE are other pressing questions facing the education minister concerning the universities. All over the country, teaching staff, administrators and students are staging walk-outs and protests at working conditions. Most French universities are severely overcrowded and many, built hurriedly in the 1960s and 1970s, are falling apart. This year there were 44,000 more students seeking places than in 1988. In the Paris faculties such as Tolbiac, Jussieu and Creteil, students are forced to stand in the amphitheatres and as many as 60 crowd into seminar-rooms designed for 20, some listening from the corridor.

New universities are being built, but will take several years to complete. In the meantime, the number of candidates is rising each year. All school-leavers who have their baccalaureat are entitled to a place in the first year of university. And the government wants the number of 'bacheliers' to double. To ease the crisis, new annexes are being set up outside Paris in the suburbs and new towns. But school-leavers will still have to queue next July — as every year — in the hope of registering in the faculty of their choice.

Peter Coles