Unconducive Research Environment in Scientific Institutions

3094. SHRI BISHAMBHAR NATH PANDE;

SHRI V. NARAYANSWAMY: Will the PRIME MINISTER be pleased to state:

(a) whether Government are aware that the scientist in the Government scientific/research institutions are facing environment/not conductive to research;

(b) if so, whether Government have conducted any survey to find out the malaise in these institution;

(c) if so, what are the details thereof; and

(d) what steps Government have taken to make the working conditions of these institutions healthy?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY, DEPARTMENT OF ELECTRONICS AND DEPARTMENT OF OCEAN DEVELOPMENT AND MNISTER OF STATE IN THE MIN ISTRY OF PARLAMENTARY AFF AIRS (SHRI P. R. KUMARAMANG ALAM) : (a) to (d) There are a large numbers of autonomus scientific res earch institutions in the counry under both the Central and State Governments. Government have made efforts to provide and sustain environment and resources conducive to the promotion of excellence in the various scientific research instituions. Considerable autonomy exists in the functioning of the various scientific research institutions i to enable the Managements to be responsive to the needs of the programmes and per sonnel of the institutions. There exist various tyoes of review mechanisms to ensure excellence and good environment These include Governing Councils Research Advisory Councils! Committees Management and Finance Committees etc. to look into various aspects. In addition Govern ment, from time to time. constitutes Review Committees involving experts to go into the functioning of the institutions Recommendations of the Review Committee are conisdered by the Government for approval and implementation. Outstanding research and development work has been done by the Scientists[1] in these Scientific Research Institutions in the fields of Defence, Atomic Energy, Space, Medicine, Modern Biology, Agriculture and other frontier areas of scientific research. It can be generally concluded that the working conditions in these institutions are healthy and the institutions are functioning effectively.

Preparation of Non Hazardous Pesticides and Bio control Methods by Indian Scientist

3095. SHRI S. S. AHLUWALIA: Will the PRIME MINISTER be pleased to state;

(a) whether it is a fact that a whole range of non hazardous pesticides and bio-control mehods against pests have all been prepared by Indian Scien tist;

(b) if so, what are the details thereof;

(c) whether it is also a fact that the pesticide industry owned mostly by Multi-national companies is seeing to it that the range prepared by Indian Scientists are not utilised at field levels;

(d) if so, the details thereof; and

(e) what corrective measures Government propose to take in this regard?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY, DEPARTMENT OF ELECTRONICS AND DEPARTMENT OF OCEAN DEVELOPMENT AND MINISTER OF STATE IN THE MINISTRY OF PARLIAMENTARY AFFAIRS (SHRI P. R. KUMARAMANGALAM); (a) to *(e)* The informaion is being collected and will be laid on the Table of the House.

Production of Amorphous Silicon Films

3096 SHRI G. PRATHAPA REDDY: DR SHRIKANT RAMCHANDRA JICHKAR:

Will the PRIME MINISTER be pleased, to state:

(a) whether the commercial pro duction of Amorphous Silicon Films for Solar Energy has begun in India as told to the members in Consulta tive Committee meeting of Science and Technology held on 13th Febru ary, 1993; and

(b) if so, the name of location of the firms producing amorphous sili con films alongwith the rates of such films?

THE MINISTER OF STATE IN THE MINISTRY OF NON-CONVEN TIONAL ENERGY RESOURCES WITH ADDITIONAL CHARGE OF THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (SHRI S. KRISHNA KUMAR): (a) and (b) As a part of a national programme for the development of amorphous silicon solar cell technology a pilot plant for the production of amorphous silicon solar cells and modules has been established by the Ministry of Non-Conventional Energy Sources at Gwalpahari in Gurgaon District of Haryana. The plant is at present being operated by Bharat Heavy Electricals Limited and is also being used for further technology development activities. The commercial price of the modules produced in he plant has not yet been fixed.

Infrastructure facilities for Research Programmes

3097. SHRI MOHINDER SINGH LATHER: Will the PRIME MINISTER be pleased to state:

(a) whether infrastructure facilities to take our various research prog-ammes in the field of Science and Technoligy, have been provided at various places in all the States:

(b) if so, the steps taken for exploiting the resources available there: and

(c) the details' of the project likely to be started in the near future?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY, DEPARTMENT OF ELECTRONICS AND DEPARTMENT OF OCEAN DEVELOPMENT AND MINISTER OF STATE IN THE MINISTR V OF PARLIAMENTARY AFFAIRS (.SHRI P. R. KUMARAMANGALAM) : (a) to (c) Yes Sir, through the mechanism of Five Year Plans, the Government has created considerable Science and Technology infrast-ructural facilities in the form of Science & Technology Institutions, National Research Laboratories etc. under the various Science & Technology departments and Socio-Econo-mic Ministries to undertake research programmes in the field of Science & Technology. In addition Government has also established State Science and Technology Councils in the States and Union Territories for formulation, planning, coordinating and promoting Science and Technology activities at the State level— .

Government has provided increased Plan allocations for Science and Technology for the Central Sector Oulay as well as State Sector. Outlay during the Eighth Plan for Science and Technology Programmes which will help in strengthening and modernising infrastructural facilities Several Science and Technology department/ agencies have extramural R and D schemes, specific to their areas of operation, which also provide considerable infrastructural facilities to the various educational institutions and research laboratories for undertaking research programmes. The University Grants Commission and Ministry of Human Resources Development have special programmes for strengthening infrastructure for Science & Technology in educational institutions. Government has also recently increased the allocations for overhead expenses on extramural R and D Schemes, which are meant to provide infrastructural support for research and development activities.

Projects approved by the SERO

3098. SHRI SANTOSH KUMAR SAHU: Will the PRIME MINISTER be pleased to state: