

SHRI B. V. KAKKILAYA: Is it not a fact that many leaders of the Karnataka movement have been detained and that in Karnataka there is no charge against them? If there is any charge, why can't they be prosecuted by the Government?

SHRI B. N. DATAR: They were not detained for holding certain opinions, but they were going to resort to the mis-called Satyagraha, and certainly most of these people had an extremely undesirable black record.

SHRI H. N. KUNZRU: Can Government not classify the detenus into various categories when asked to do so?

SHRI B. N. DATAR: They have been classified under section 3, clauses (i), (ii) and (iii) (a) and (b).

MR. CHAIRMAN: Will Members of Parliament be detained if they indulge in counter-revolutionary bourgeois activities like cricket?

PROGRAMME FOR SCIENTIFIC WORK

*254. **SHRI GOVINDA REDDY:** Will the Minister for NATURAL RESOURCES AND SCIENTIFIC RESEARCH be pleased to state:

(a) what programme of work has been fixed for the current and future years for the production of literature on applied sciences and for the development of science consciousness among the people;

(b) what amount has so far been set apart for such work; and

(c) what machinery will be employed to work out the programme?

THE DEPUTY MINISTER FOR NATURAL RESOURCES AND SCIENTIFIC RESEARCH (SHRI K. D. MALAVIYA): (a) to (c). Two statements giving the required information are laid on the Table of the Council.

Statement I

The following journals and bulletins are published by the organisations listed below:—

Council of Scientific and Industrial Research—

- (1) The Journal of Scientific and Industrial Research (Monthly).
- (2) Vigyan Pragati—A Hindi Journal (Monthly).
- (3) "CSIR News" (Fortnightly).
- (4) Bulletin of the Central Food Technological Research Institute (Monthly).
- (5) Bulletin of the Central Leather Research Institute (Monthly).
- (6) "FRI" News (Quarterly).
- (7) Road Research Notes.
- (8) Bulletins prepared by the Advisory Committees of the Council of Scientific and Industrial Research from time to time.

Geological Survey of India.—

- (1) Bulletins relating to Economic Geology, Mineral resources, Engineering Geology, Ground Water and Geophysics.
- (2) Indian Minerals (Quarterly).

Indian Council of Medical Research.—

- (1) The Indian Journal of Medical Research. (Quarterly).
- (2) The Indian Journal of Malariology (Quarterly).

Malaria Institute of India, Delhi.— Malaria Health Bulletins.

India Meteorological Department.—

- (1) Monthly Weather Report.
- (2) India Weather Review (Annual).
- (3) Indian Journal of Meteorology and Geophysics (Quarterly).
- (4) Seismological Bulletins (Quarterly).

(5) Bombay Magnetic Data (Annual).

Posts and Telegraphs Department.—

A six monthly journal dealing with tele-communication problems.

Ministry of Railways.—

Indian Railways Technical Bulletins.

Statement II

Scientific and technical information is disseminated for the benefit of general public with a view to create science consciousness in the following ways. No staff is employed specially for this work nor are separate funds provided for it.

(i) Non-technical notes in topical language for laymen describing scientific work in progress all over India and results achieved is prepared monthly by the Ministry of Natural Resources and Scientific Research and sent to the Press Information Bureau of the Government of India for publication in English, Hindi and Urdu Newspapers and Journals.

(ii) The Council of Scientific and Industrial Research issue press releases in English and Hindi on Scientific work done in the National Laboratories and results achieved.

(iii) In the Sunday issue, one or more scientific topics of wide appeal are discussed in non-technical language. Weeklies and monthlies, intended for popular reading and issued in regional languages, devote space to achievements in science and technology. Background material for such publications is prepared and supplied by scientific societies and the survey and information divisions of research institutions.

(iv) The various Ministries of the Government of India also send to the Press Information Bureau of the Government of India short notes of scientific

work done by institutions under their purview.

(v) Elementary Scientific and Technical information is included in some pamphlets in Hindi published by the Idara Talim-e-Taraqqi, Jamia Millia, Delhi under a scheme financed by the Government of India for use by the State Governments in their Social (Audit) Education programmes.

(vi) Documentaries on Scientific subjects though few in number, are screened in the various Cinema houses in India. Mobile and camp cinema houses have become valuable agencies for the dissemination of scientific knowledge in villages and small towns. Preparation of two documentaries, one dealing with the research activities of the Fuel Research Institute, Dhanbad and the other on "Mines and Minerals" is in progress this year.

(vii) Talks on Scientific topics are broadcast as a regular features by the All India Radio. Scientific topics are frequently discussed in Children's and Women's programmes. Popular radio talks are often given by scientists associated with research.

(viii) Various Scientific Societies in India publish journals, parts of which are devoted to the discussion of topical scientific problems and to the publications of articles devoted to advances in scientific research. Notes and New Sections of the journals give information relating to the discoveries and achievements in the field of science.

(ix) The Council of Scientific and Industrial Research prepare non-technical notes on processes developed at the National Laboratories. These notes are published and circulated to various commercial and industrial bodies and interests with an invitation to those interested to apply for the rights of commercially exploiting the process.

(x) The National Laboratories and the Central Secretariat of the Council maintain Survey and Information

Divisions which supply information on scientific subjects, to those interested.

(xi) The National Laboratories of the Council of Scientific and Industrial Research have been organising museums which serve as instruments of education for the layman. State museums serve the general public likewise. Science exhibitions are organised annually by the Indian Science Congress Association at the places of its meetings. Industrial and Agricultural exhibitions are also organised from time to time.

(xii) The Council of Scientific and Industrial Research is publishing 'Wealth of India'—Dictionary of Raw Materials and Industrial products of India. This work, it is expected, will be published in 10 volumes each consisting of 2 parts—one devoted to raw materials and the other devoted to industrial products.

(xiii) The Geological Survey of India publish (a) Memoirs and Miscellaneous publications consisting of scientific papers and monographs etc. relating to regional geology, mineral resources, petrology or other special subjects; (b) "Paleontologia Indica" consisting of monographs relating to paleontology, i.e. description of fossil collections and miscellaneous publications which include catalogues, Bibliographies, indexes and the manual of Geology of India.

(xiv) The Director General, Health Services publishes pamphlets and posters in English and Hindi on various Health subjects and articles on Health and nutritional matters in the press.

(xv) Indian Council of Medical Research publishes technical reports in special fields of medicine and public health and periodical reviews in popular language explaining the work of the Council.

(xvi) Central Research Institute, Kasauli publishes results of research carried out at the Institute in scientific journals and issues press commu-

nications from time to time on the preventive aspect of communicable and infectious diseases.

(xvii) All India Institute of Hygiene and Public Health, Calcutta publishes results of important scientific researches conducted at the Institute in scientific journals.

(xviii) The Malaria Institute of India, Delhi publishes bulletins and leaflets from time to time.

(xix) The observations on the meteorological elements and conditions of weather over the whole country and neighbouring ocean areas including upper air are collected and published periodically by the India Meteorological Department in (a) Indian Daily Weather Report, (b) Daily Rainfall of India, (c) Weekly Weather Report, (d) Monthly and Annual Rainfall of India, Handbooks, atlases, manuals, popular pamphlets etc. on various aspects of Meteorology for general use and for the use of specific interest such as aviation, agriculture etc. are also published from time to time.

(xx) A Vigyan Mandir has been recently set up as an experimental measure, with a view to achieving the same object. If this experiment succeeds, it is proposed to set up a chain of similar Vigyan Mandirs in the country.

It is virtually impossible to calculate the amount of funds set apart for this work. The Government of India finances a large number of scientific institutions and societies by giving them grants-in-aid. These scientific institutions and societies put out literature from time to time relating to their activities and the results obtained, all of which helps to develop science-consciousness among the people.

SHRI GOVINDA REDDY: I find that it is a long list of activities and that good work is being done, but I want to know whether these pamphlets and bulletins and booklets that are being issued for the dissemination

of this knowledge have been sent to the States to be translated into the various regional languages, thereby to help in the dissemination of this knowledge.

SHRI K. D. MALAVIYA: Yes, Sir. Translations of non-technical notes are also undertaken by the Council of Scientific and Industrial Research, and I presume that there is an organisation at the State level (research committees) where they are writing and may be translating these notes.

SHRI GOVINDA REDDY: At present these are published in Hindi, English and Urdu. My question was whether any attempts would be made at least now to publish these in all the vernacular languages or regional languages of the States?

SHRI K. D. MALAVIYA: There are Research Committees at the State level. I will certainly take up this matter with those State Committees and pass on the suggestion.

SHRI GOVINDA REDDY: Will Government give a list of associations which are established for the purpose of disseminating knowledge and then send this material to those associations?

MR. CHAIRMAN: That is a suggestion for action.

SHRI K. D. MALAVIYA: There are various associations which receive these pamphlets and publications of our Scientific Institutes and C. S. I. R.

SHRI GOVINDA REDDY: Will copies of these publications be distributed to Members of Parliament who are the best means of disseminating these?

SHRI K. D. MALAVIYA: Many of them are scientific publications of a technical nature, but if any hon. Member wants them, we will certainly do so.

SHRI K. S. HEGDE: What is the reason for printing them in Urdu rather than in Hindi? Why this preference for Urdu to Hindi?

SHRI K. D. MALAVIYA: There is no preference for Urdu. Some of them are published both in Hindi and Urdu.

PRECAUTIONS AGAINST RADIO ACTIVITY

*255. SHRI GOVINDA REDDY: Will the Minister for NATURAL RESOURCES AND SCIENTIFIC RESEARCH be pleased to state:

(a) whether the Atomic Energy Commission has undertaken the work of devising means for protection against radio activity; and

(b) if so, the results of such work?

THE DEPUTY MINISTER FOR NATURAL RESOURCES AND SCIENTIFIC RESEARCH (SHRI K. D. MALAVIYA): (a) The Atomic Energy Commission has set up a Medical and Health Division to keep constant check on the health of the workers and to study the problems of radiation hazards.

(b) This Division has been started very recently.

SHRI GOVINDA REDDY: Is it not a fact that there is a controversy about the effects of testing these atom bombs and that these tests have resulted in spreading ill-health and carrying death to other people who are not working with them?

SHRI K. D. MALAVIYA: There are damaging effects of radiations of various types on biological tissues. In order to protect us from them it is better to understand the fundamental processes involved in these decaying effects and that is why the C.S.I.R. has recently started a Biological Division to investigate the processes. As a result of this, a standard routine method has been prescribed against exposure to radioactive and x-ray hazards and in all our Atomic Energy