ASSISTANCE 10

BRAZIL, PAKISTAN and THAILAND

IAEA's technical assistance programme for the current year includes aid to atomic energy projects in Brazil, Pakistan and Thailand.

It is proposed to establish a radiation measurement service in Brazil where radioactive isotopes are finding increasing use in medicine, industry and research. Private physicians alone have installed about six kilocurie cobalt-60 radiation sources; these are in addition to those installed in hospitals. Most of the radioactive material is imported but small quantities are also produced internally.

At present, radioactive material can be bought and used in Brazil without public control. But the Brazilian authorities consider government control of the purchase, distribution and use of such material necessary in order to protect the public against inadequate use of radiation sources. The implementation of any possible legislation on this subject, however, depends on the availability of adequate facilities for the precise measurement of radioactivity and radiation doses. Equipment for qualitative measurements is available in several research establishments, but equipment for precise standardization, calibration and testing work is lacking.

The assistance to be provided by IAEA will consist of equipment for the proposed service, and experts who would give courses in their respective specializations and co-operate in the testing of equipment, initiation of measurements and organization of working plans.

It is planned that the service will be provided by the Institute of Biophysics of the Faculty of Medicine of the University of Brazil and by the Brazilian National Institute of Technology.

PAKISTAN

Pakistan s request for experts came after an IAEA mission had had consultations with the Pakistan authorities on that country's atomic energy programme. The Agency is putting three specialists at the disposal of the Pakistan Atomic Energy Commission: one of them an expert on research reactors, another on radioisotopes and irradiation by gamma rays, and the third on health physics.

The Pakistan Government has decided to set up an Institute of Nuclear Research and Reactor Technology, where it is planned to install a reactor with a power level of 1 MW to be increased later to 5 MW. The main purposes of the reactor project will be: training on reactor operation and reactor physics; training and research in neutron physics; research on radiation physics and nuclear chemistry; production of

radioisotopes; biological research on the effects of radiation; radiation protection and shielding, and research in nuclear engineering and metallurgy.

The reactor will be located at a distance of about 12 miles from Karachi. The reactor and its accessories are expected to be completed by the middle of 1960, and the experimental supporting facilities in 1962.

THAILAND

dential area

Under a third project, IAEA has sent an expert to Thailand to assist in the development of the medical applications of radioisotopes, particularly in diagnosis and clinical research. For some time, the Atomic Energy Commission of Thailand has been promoting such use of radioisotopes in that country. Some equipment for this purpose has been assembled in the Siriraj Hospital, Bangkok, and placed at the disposal of the Department of Radiology and of the School of Medical Technology. Qualified medical personnel have been sent abroad for training and some are already back in Bangkok. But working conditions in Bangkok as well as the clinical situation (so far as the type of patients and kinds of diseases are concerned) differ considerably from those prevailing in areas where Thai doctors have been or are being trained. Advice on the spot by the IAEA expert will, therefore, be valuable as a supplement to the training obtained in foreign countries.

