

Minister's Speech

It gives me great pleasure to be here today when this new laboratory is being opened by our honourable Prime Minister. This national facility, a new concept in the Interdisciplinary and inter Institutional collaborative research in Agriculture, has been set up with the kind help of The United Nations Development Agency ^{with} and the International Atomic Energy Agency ^{as the Executing Agency.} I very much appreciate the place of science in the development of the country and the need for giving scientists adequate opportunities and facilities to enable them to function efficiently. This Institute has played a very significant role in the rapid development of new agricultural techniques which has infused self confidence in our agricultural capability. It is appropriate therefore, that most upto date and sophisticated ^{using Nuclear energy} tools have now been made available to the scientists ^{in the Nuclear Research Laboratory to solve practical problems in a number of fields which are of importance to the improvement of Agricultural production in the country.} The fields in which the new tools will be applied are those of crop variety improvement with special reference to the nutritive value of cereals, pulses and oil crops.

The rapid screening techniques of protein and oil quality will undoubtedly lead to the development of nutritionally superior varieties. Already very commendable work has been done by the scientists of this Institute in this field.

Second field of activity to receive the immediate attention is the efficient fertilizer and water use. The quality of ^{such} the agronomic research of this Institute has been judged as best by ^{world} ~~such~~ authorities, as ~~Dr. Norman Borlaug~~. With the introduction of sophisticated isotope tracer techniques, I am sure the dividends will increase manifold. Thirdly, the field of animal health and production is one of the important objects of this programme. I am glad to know that the National Dairy Research Institute, Karnal and The Indian Veterinary Research Institute, Izatnagar are active partners in this project. Already ^{Radiation attenuated lungworm vaccine} ~~they~~ ^{Success} ~~have~~ achieved great ~~meers~~ in ~~the~~ control of lungworm disease of sheep in Kashmir, ~~using~~ ~~gamma irradiated vaccine~~. I am confident that much needed boost to our animal productivity will come from such projects of applied nature. Last but not ^{the} least important is the use of radio - isotope and irradiation techniques to control

pests and diseases and save pre and post harvest losses thereby.

These coordinated interdisciplinary and Inter-institutional projects are bound to give valuable dividends since such approach involves complete harmony and constant dialogue between different disciplines of agricultural research. This would add much needed speed to our work, reduce the costs and provide a sense of sharing in our ~~Young~~ Scientists. I understand that the extension ^{work} has also been taken into this fold. I believe that the success of this project will depend on as to how fast the new ideas developed at this radiating centre of modern agricultural research reach the farmers.

For the healthy growth of this modern laboratory a very close and continuous International cooperation is essential. Effective and expeditious results can be obtained by drawing on the world pool of knowledge and plant germplasm. I was glad to know that one of the important features of this programme is the training of our ~~Young~~ Scientists and technicians in the leading laboratories of world through the

kind help of UNDP and IAEA. I also understand that some eminent world scientists are coming to work here as guest scientists and share their expertise with their counterparts in India.

I have been asked to open the exhibition in which the results of some projects are on display. I am well aware of the achievements in castor, cotton, groundnut, rice, wheat and other crops where new crop varieties have been developed by our scientists through the use of nuclear techniques. Similarly the work ^{done the} on fertilizer uptake, water use, animal metabolism and control of plant and animal diseases is sufficient indication that the new techniques will accelerate the ~~pace~~ face of our agricultural research. I am convinced of the potential of our scientists and the nuclear tools.

It is very appropriate that this ceremony is to be followed by an international ^{symposium} ~~seminar~~ on the use of nuclear tools in agriculture, to focus attention on the lines of research activity which will yield results of practical and applied nature. I wish to welcome, most cordially, the

eminent scientists from abroad and those who have come from different parts of this country. With your cooperation I hope that the forthcoming symposium will prove to be worthy of the special occasion that you are celebrating and that your discussions will lead to greater interest in the use of nuclear techniques in agriculture. I wish you all success in your deliberations.