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AGRICULTURAL RESEARCH AND RECONSTRUCTION*

THE task before us is of vast magnitude and we require the co-operation of every individual in the country for the vast task of construction which awaits us. Our main problem is to link our man-power with the vast material resources of the country and to develop them according to a plan. In planned scientific development lies the salvation of the country and in this great task scientific research workers, particularly those who have chosen agriculture and animal husbandry as fields for their activities, have a great task to perform.

There was a time when India was said to be flowing with milk and honey. Recently we have had to pass in Bengal through a period of famine which took a heavy toll. The immediate task, therefore, before us is to step up food production so that all persons in this country have two square meals a day. The war and famine in Bengal have brought home to us the marginal nature of our food production in a rather tragic manner. Now our task is to rectify this ill-balance between population and food production by producing better and more food. Research workers in India must concentrate on the task of evolving better and high yielding varieties of crops, in discovering better cultural practices and in placing more efficient tools in the hands of the cultivator. In our search for better tools and means of irrigation we should not forget that those will not be utilised unless they are such as our ordinary cultivator can afford. While concentrating multi-purpose dam irrigation schemes not only to provide irrigation for our thirsty lands but also cheap power for agriculture and industry, we should not neglect to improve the well, the rivulet and the tank and must find ways and means such as cheap and efficient pumps which can be worked with the help of power—human and other animal—which are available and within the competence of the Kisans of India.

Agriculture is the most important industry in the country which gives employment to masses of people and provides food for the entire population. Agriculture and food should have the highest consideration and agricultural research, which places in our hands means of increasing the food supply of the country, should have the highest priority and no amount of attention given to its advancement can be too great. We may remember that agriculture in India is entirely dependent on bullock power and is bound to remain so in the foreseeable

* Abstract of an Address delivered by Dr. Rajendra Prasad, Hon'ble Member in charge of Food and Agriculture, to the Sixteenth Meeting of the Governing Body of the Imperial Council of Agricultural Research, on 25th September 1946.

future. The cow and her progeny, therefore, claim and should get our attention so that there may be not only a plentiful supply of milk which is such an essential item of balanced diet but also of strong and healthy bullocks necessary for efficient cultivation and other draught purposes.

Since its birth in 1929, the Imperial Council of Agricultural Research has performed great service to the people. Agricultural research in this country has provided high yielding sugarcanes, wheats, cottons, and paddies to the cultivator but we must recognise that even in respect of these our production is very much less than what it is in other countries, as the following comparative statement will show.

Average yield per acre (in lbs.)

	Average Yield per Acre (in Lbs.)									
	India	Argentine	U.S.A.	Canada	Italy	Egypt	Japan	Java	Peru
Wheat	636	780	846	972	—	—	—	—	—
Rice	851	—	1333	—	2797	1845	2124	—	—
Cotton	89	151	264	—	—	531	—	—	—
Sugarcane	388 (in maunds)	—	—	—	—	—	—	1446 (in maunds)	1160

We have, therefore, no reason to rest on our oars and further and more intensive work which will help the ordinary Kisan to increase the yield is necessary. I recognise, however, that but for the efforts of research workers the shortages in respect of some of these products that we are experiencing now would have been greater still.

The Imperial Council of Agricultural Research provides a meeting ground where Ministers of Agriculture of Provinces and constituent Indian States, representatives of Central Legislature, Indian and European Commerce and of the Government of India, can discuss problems of agricultural research and guide, co-ordinate and promote research. One of the main functions of the Council is to place at the disposal of research workers throughout India experience of their fellow-workers in this country as well as scientific and technical information derived from foreign countries. The Council also acts as a clearing house of scientific knowledge on the problems of agriculture and animal husbandry. It has provided an organisation for pooling ideas and techniques so that the whole of India may benefit from the experiences of every part. Science cannot flourish in isolation. The best brains of the country must be brought together so that they may be able to exchange views and experience and to pool knowledge. On the Advisory Board of the Council and its Committee the scientific and technical side of agriculture and animal husbandry research in the country is represented, while the Governing Body controls policy and finance. By promoting, guiding and co-ordinating agricultural and veterinary research in India, by training research workers and collecting and disseminating information on research through its publications, the Council has been performing a useful function.

Ultimately, all research must be judged from the contribution it makes to the welfare of the masses. A poor country like India can illafford ivory-tower research divorced from the realities of life and the needs of its cultivators. It is the needs of the cultivator which research workers must always keep in view. 'Science in the service of the country' must be our ideal. It is generally admitted that investment in scientific research is the best investment which a nation can make as the returns which it provides are out of all proportion to the money invested. As an example we may cite the case of sugarcane development in this country which has saved the drain of millions of rupees to foreign countries. I can give you the assurance that this Council will have all my support and sympathy.

NATIONAL RESEARCH LABORATORIES

INDIA'S scheme to set up four more National Laboratories at an estimated capital cost of Rs. 132 lakhs is being launched. The plans for these were approved recently by the Governing Body of the Council of Scientific and Industrial Research.

The Hon'ble Mr. C. H. Bhaba, Member for Works, Mines and Power in the Interim Government, laid the Foundation Stone of the Fuel Research Institute at Digwadih, near Dhanbad, on November 17. The capital cost of the Institute, is estimated at Rs. 14 lakhs.

The Hon'ble Mr. C. Rajagopalachari, Member for Industries and Supplies, and President, Council of Scientific and Industrial Research, laid the Foundation Stone of the National Metallurgical Laboratory at Jamshedpur on November 21. The initial capital expenditure on this laboratory will be about Rs. 43 lakhs.

The Foundation Stone of the National Physical Laboratory will be laid by the Hon'ble Pandit Jawaharlal Nehru, Vice-President, Interim Government, on January 4, 1947, at Delhi, during the Indian Science Congress Session. The estimated cost of this laboratory is about Rs. 40 lakhs.

The Hon'ble Mr. B. G. Kher, Prime Minister, Bombay, will lay the Foundation Stone of the National Chemical Laboratory at Poona sometime towards the end of January 1947. The Government of Bombay recently agreed to the location of this laboratory in Poona and the transference to the Council of the land required for this purpose. The Chemical Laboratory is expected to cost Rs. 35 lakhs.

The first of the five National Laboratories planned for the industrial development of the country was the Central Glass and Ceramic Research Institute costing about Rs. 12 lakhs. The Foundation Stone of this was laid by Sir Ardeshir Dalal, former Member for Planning and Development, Government of India, in last December at Calcutta.