

Prime Minister, Shri Charan Singh's inaugural address at International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) Hyderabad. on 30/08/1979

Mr. Chief Minister, Mr. Chairman and
Members of the ICRISAT Governing Board,
Mr. Director, Distinguished Scientists,
Ladies and Gentlemen:

I have great pleasure in participating in this function, which marks the completion of the construction of the laboratory and other essential facilities for the scientists working at the Institute. I would like to congratulate the ICRISAT Board, Director and Staff, the Andhra Pradesh Government, and all others concerned, on this accomplishment. I am sure that with such magnificent facilities, the scientists of this institute will be able to fulfil the role that has been assigned to them viz. to generate technologies which can help to elevate and stabilise crop production in the Semi-Arid Tropics.

The Crops you have chosen for your research, as well as the farming systems included in your mandate, are important for the welfare of our rural population. Over 70 percent of the cultivated area in India is dependent upon rainfall for raising crops. In fact, whenever rainfall failed in the past, there used to be no agriculture and hence there was also no employment. The result was widespread hunger and famine. After India became independent, we have been able to successfully avoid famines and starvation deaths as was witnessed in Bengal during World War II. We now operate a "Food for Work" programme, which is larger with reference to the quantity of grains involved than the entire World Food programme.

New technology, which can help farmers to mitigate the adverse of impact of aberrant weather on crop production, is in urgent need of the semi-arid tropics. It is only after 1930 that experimental stations were started by the Indian Council of Agricultural Research to develop improved techniques of dry farming. These techniques did not have the desired impact since the improvements brought about were marginal and the risks were still high. However, during the last 8 years, scientists of the Dry Land Farming Research Project of the Indian Council of Agricultural Research have been able to develop integrated techniques of soil and water conservation, short duration and drought-avoiding crop varieties, and methods for better plant protection and plant nutrition. These are now being tested in pilot development blocks.

In spite of these efforts, it is clear that we need a larger and more intensive inter-disciplinary attack on the complex problems of semi-arid and rain-fed agriculture. It was, therefore, an act of vision and the part of FAO, UNDP World

Bank and other Members of the Consultative group and International Agricultural Research that they decided in 1972 to establish this Institute here at Hyderabad. The results achieved by the scientists of this Institute within a span of seven years demonstrate the power of science to find solutions to complex problems. ICRISAT is an example of the value of international and interdisciplinary collaboration in agricultural science. The crops you have chosen for investigation such as jowar, bajra, groundnut, gram and pigeon pea or arhar are important both to the economy of our country and to the nutrition of our population. Dry farming areas contribute over 50 percent of our food production and over 75 percent of the production of cotton, groundnut and pulses. It is of interest that although those crops now occupy such an important place in Indian Agriculture, they are all not native to India, they have come from other continents, and particularly from Africa. Thus, agriculturists have from time immemorial never recognised political and geographical boundaries. Man has domesticated and used all plants which are of value to him irrespective of their place of origin. I am glad that scientists have emulated this example and have come to other from different parts of the world and established a working partnership at this Center. Mahatma Gandhi advised us to keep our windows and doors open, so that fresh air and new ideas may come from all sides. The work of this institute exemplifies the wisdom underlying this advice of his.

While India is making progress in improving the production of cereals like wheat and rice, we have not been able to make similar progress in increasing the production of pulses and oilseeds. We are, therefore, anxious to step up the pace of progress in increasing the production of groundnut, gram and arhar crops on which ICRISAT is doing research. Our Agricultural Ministry has been working on a strategy for popularising improved technological packages in major pulses and oilseeds through a National Minimum Yield Guarantee Programme in these crops. The aim is to achieve growth with stability and insulate farmers from risk beyond human control. In this context, I am happy to learn that the ICRISAT Board has set up a special committee to deal with problems of technology transfer. We shall welcome whatever help you can give us in improving the production of pulses and oilseeds. The Indian Council of Agricultural Research is setting up a national research centre for groundnut at Junagarh in Gujarat State. I hope this Centre and ICRISAT can together develop high yielding varieties of groundnut soon.

I understand that your mandate covers the semi-arid areas of not only Asia but also Africa and Latin America. All these countries have farming systems which are several thousand years old. While modernising these systems, it should be remembered that not all the earlier practices have to be discarded. Some of them are particularly suited to local climate and soil conditions. Therefore, instead of discarding such practices, it is important that they are improved in such a manner that the retention of moisture and growth of seedlings can be promoted.

Should modernisation of agriculture automatically imply mechanisation in countries like India, where generation of opportunities for gainful employment is the most challenging task. Whatever mechanisation or modernisation of agriculture is necessary, it should lead to labour diversification and reduction of drudgery rather than to labour displacement.

I would like to enumerate particularly for the information of those who have come from outside the country, some of the steps we have recently taken here in India to promote agricultural growth with stability of production in un-irrigated areas. First of all, we have expanded our efforts in the area of irrigation and particularly minor irrigation. We have introduced liberal subsidies for ground water exploitation both through individual and community farm ponds. We have made farmers owning upto 4 hectares eligible for subsidy for ground water utilisation. Secondly, we have introduced a National Programme for the construction of rural godowns to store state and market farm produce. Farmers in the dry farming regions of India are poorer than those living in irrigated areas. Consequently, they have little capacity to hold farm produce after harvest. They tend to sell immediately after harvest, grains like jowar, bajra and pulses, at a low price - even lower than the support price announced by Government. It is hoped the National grid of Rural Grain Storages, which we are now promoting, would help to insulate poor farmers from exploitation and from distress sales. I consider that producer - oriented marketing is the key to stimulating scientific agriculture.

Thirdly, we have started from August 15, this year, a National Programme of Training Rural Youth for Self - Employment in various sectors of agriculture and agro - industries. Under this Training Programme, we wish to impart relevant skills to at least 200,000 rural boys and girls each year through the technique of "Learning by doing". I hope this Institute can also lend a helping hand to this programme. Finally, through various programmes like the Small Farmers' Development Agency, Drought Prone Area Programme, Desert Area Development Programme and integrated Rural Development Programme, we have introduced a variety of services to farmers. I am, therefore, confident that, if economically viable technological packages become available, our farmers will convert un-irrigated areas into productive farming ones.

The year 1972 when the Institute was established was characterised by abnormal monsoon behaviour and drought. This year again, when the ICRISSAT Centre is being inaugurated, the behaviour of South-West monsoons has been abnormal. Therefore you have an opportunity to assess critically during this season the impact of your research, particularly since Andhra Pradesh is one of the States affected by severe drought.

Some parts of North India have been affected by floods as well as drought. We also had flash floods in the Luni River Basin of the arid area of Rajasthan, and also more recently, in the Morvi area of Gujarat. Floods and drought, cyclones

and hail-storms cause untold hardship to people as well as damage to crop and animal husbandry. We have streamlined procedures for disaster preparedness and introduced a three-pronged strategy for achieving stability of production at the national level. The major components of this strategy are: (i) the introduction of crop life-saving techniques, including water conservation and recycling; (ii) the introduction of alternative crops based on contingency plans to suit different weather conditions; and (iii) the initiation of compensatory production programmes in irrigated areas and in non-traditional seasons. For example, the area under jute in West Bengal and Assam went down this year due to lack of rains upto the middle of June. I am, however, happy that Andhra Pradesh has come to the rescue by increasing the area under mesta by over 30 percent. This is one of the advantages of tropical and sub-tropical agriculture, where due to the abundance of sunlight throughout the year several crops can be grown.

Scientists should help to perfect the crop yield stabilisation strategy. From the side of Government, I can only assure you that as soon as you develop technologies which are economically stable and rewarding will take steps to pass on the benefits to our farmers through appropriate packages of services and public policies.

I offer my best wishes to the Director and Staff of ICRISAT for continued success in the work of this Institute. I am glad that you have chosen this occasion for organising an International Symposium on "The Development and Transfer of Technology for Rainfed Agriculture". Exchange of ideas among scientists from different countries should lead to fruitful results. I shall look forward to reading the recommendations of your symposium. If regional imbalances in economic advance are to be remedied in India, un-irrigated agriculture must receive the greatest priority in the attention of both scientists and extension workers; I hope the establishment of ICRISAT in India leading to interaction among scientists of so many different countries will open up a new era of hope and progress for the rainfed farmer.

I wish all the delegates who have come from abroad a very pleasant stay in India.

I have, now, great pleasure in inaugurating the ICRISAT Centre.
