

**SPEECH BY THE PRESIDENT OF INDIA, SHRI PRANAB MUKHERJEE
AT THE CONFERENCE OF VICE CHANCELLORS OF AGRICULTURAL
UNIVERSITIES, DIRECTORS OF
ICAR INSTITUTES AND PROGRESSIVE FARMERS**

Baramati, Maharashtra: January 19, 2014

1. It is my privilege to be here today for the inauguration of the Conference of Vice Chancellors of Agricultural Universities, Directors of Institutes of Indian Council of Agricultural Research (ICAR) and Progressive Farmers. I thank Shri Sharad Pawar, Union Minister of Agriculture and Food Processing Industries, for inviting me to this important Conference. I am glad to have this opportunity to address a distinguished gathering of public leaders, agriculture research managers, scientists and educationists. This annual Conference is part of an effort to institutionalize the interface between key partners in agricultural research, education and extension. I compliment the organizers for undertaking this initiative.

2. In my day-long visit to Baramati today, I have had the occasion to witness the scale of agricultural development that has taken place in this region. Its development model is worthy of replication in other parts of India, especially where 3 Ps i.e. production, productivity and profitability of the agricultural sector is low. I applaud the efforts of all the stakeholders who have been instrumental in bringing about the visible change.

Ladies and Gentlemen:

3. The agriculture sector is one of the major success stories of post-independent India. We had inherited an under-developed agricultural system in 1947. We were a net food importer to the tune of an average 3 million tonne per year between 1946 and 1952. Due to the vision of our policy makers, ingenuity of our agricultural scientists and the industry of our farmers, India became self-sufficient in food grains. We are today a leading producer of several

food commodities - cereals, fruits, vegetables, milk, eggs and fish. We have produced 255 million tonne of food grains in 2012-13 after setting a record of 259 million tonne in the previous year. Healthy agricultural growth has improved food security along with nutritional security.

4. Agriculture remains central to India's economy. The livelihood security of an incredibly large number of farm families is linked to agriculture. 85 per cent of small and marginal farmers derive their livelihood from this sector. To make farming more remunerative and to transform farmers into *agripreneurs*, research innovations for low cost technologies, machines and tools are necessary. This year has been declared by the United Nations as the International Year of Family Farming. This is the time to stimulate active policies for sustainable development of agricultural systems based on farmer families and cooperatives. Programmes such as Bringing Green Revolution to Eastern India and National Food Security Mission have already provided the much needed boost to productivity of major crops in several states. I am sure the thrust to increased agricultural productivity will continue.

Ladies and Gentlemen:

5. ICAR is the apex organization for agricultural research and education in our country. It has completed almost eight and half decades of meritorious service. Through technological solutions, it has placed Indian agriculture on a firm footing. It has to now focus on emerging issues like climate change, natural resource degradation, appearance of new host-parasite complex, concerns for bio-safety, restrictive trade regimes, competitiveness of farm produce, improvement in farm income, shift in the consumption pattern towards processed food, and increased demand for food items of animal origin. I have full faith in our institutions, scientists and farmers to convert these challenges into opportunities.

6. Greater productivity and profitability have to be brought about by improved resource management, diversification and good breeding approaches. The net sown area in our country has stabilized at around 140 million hectares. At the same time, there are large tracts of wastelands. Newer technologies are required to bring such land under productive use. Technologies for reclamation of problem soils - salt-affected, water-logged or acidic soils – have to be popularized for horizontal expansion of area under cultivation. Harnessing modern biology in agriculture is the need of the hour.
7. Water stress, in terms of access and availability, has thrown up significant challenges for researchers and institutions. In the 80 million hectare rain-fed areas of our country, technological interventions - rainwater harvesting and recycling, *in situ* moisture conservation – have raised farm production and reduced inequities in livelihood opportunity. Such technologies to conserve resources through increased input-use efficiency have to be pursued vigorously.
8. Seed and planting material are crucial productivity-enhancing factors. The institutes of ICAR and agricultural universities have to strengthen their programmes to produce quality seeds, with an emphasis on improving the seed replacement rate in crops.
9. Agricultural productivity has a direct correlation with farm power availability. The present availability of 1.7 kilowatt per hectare is quit inadequate to achieve the desired productivity levels. In a scenario of rising energy costs, it is vital to enhance energy-use efficiency. At the same time, in the context of growing scarcity of farm labour, it is critical to leverage farm mechanization.

Ladies and Gentlemen:

10. Horticulture is a sunrise sector of our economy. Development of better hybrids, rejuvenation of old orchards, pest and nutrient management, post-harvest management and protected cultivation are steps necessary for the development of horticulture crops. To build resistance to biotic and abiotic stresses in such crops, hybrid technology has to be developed. Such technology can also promote hybrids in rice, maize, sunflower, pearl millet and cotton, resulting in significant productivity gains in all these products.
11. Sizeable output of perishable fresh-farm produce calls for a paradigm shift from primary to secondary agriculture. The development of food processing sector can be a vital link between industry and agriculture. Greater investment in infrastructure, marketing, storage and transportation has to be made. More research on food processing, cold chains, handling, and packaging of processed food has to be undertaken.
12. The advent of genetic engineering has removed the natural barrier to gene exchange and transfer. Development of transgenic crop varieties having the novel traits of insect resistance, herbicide tolerance and hybrid production has led to significant cultivation of Genetically Modified crops. These crops presently occupy 170 million hectares in 28 developed and developing countries. In India, Bt-Cotton has boosted cotton production and enhanced its export earnings. We have to pursue these new technologies for the benefits they provide. At the same time, public concerns have to be addressed through increased awareness and biotechnology education.
13. The agriculture sector is in the throes of a dynamic and increasingly globalized world economy. A greater understanding of market intelligence mechanisms, good trade practices, and legal aspects of

the multilateral trade regime and intellectual property rights is absolutely necessary. This calls for the development and institutionalization of user-friendly knowledge systems to support decision-making by various client groups.

Ladies and Gentlemen:

14. Science-led growth of agriculture has paid rich dividends as the developmental experience of India's agriculture has shown. Agricultural education has to be in the forefront of building a scientific base for research and extension. Our agricultural universities have to play an important role in imparting quality education to students, making them professionally competent and socially sensitive. To harmonize agricultural education with excellence in science and technology, they have to undertake initiatives aimed at faculty and institution development, and reforms in governance and curriculum. I am pleased to learn that ICAR has initiated the National Agricultural Education Project to improve and sustain the quality of higher agricultural education. It has also contemplated innovative student programmes such as READY, which stands for Rural Entrepreneurship and Awareness Development Yojana; ASPIRE, or Agriculture Science Pursuit for Inspired Research Excellence, and ARYA, or Attracting and Retaining Youth in Agriculture.
15. Krishi Vigyan Kendras (KVK) has immense potential to strengthen outreach programmes of agricultural universities and research institutions. The KVK model has to use its multi-disciplinary approach effectively to provide training and demonstration support to farmers. I am happy to have been a part of the inauguration of a new campus of the KVK and a technology exhibition at Baramati, earlier today.
16. This Conference has accorded a unique opportunity to the Vice Chancellors of different universities and Directors of ICAR Institutes

to discuss ways and means to ensure uniformity in agricultural education and governance across the country. I am confident that your deliberations here will help to identify common areas of collaboration and to harness synergies to make Indian agriculture more robust. The billion plus countrymen have great expectations from you. On your success, their future depends. I wish all of you effective and productive deliberations during the Conference.

Thank you.

Jai Hind.
