

16TH FOUNDATION DAY

March 28, 2016

Foundation Day Address

by

Prof. M. Premjit Singh

Hon'ble Vice Chancellor

Central Agricultural University, Imphal



**Central Agricultural University
College of Horticulture and Forestry
Pasighat-791102, Arunachal Pradesh**



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Mrs. Isa Khosla, Deputy Commissioner, East Siang district, Dr. S.S.Nagra, Director of Instruction, CAU, Imphal, Esteemed Dean of the College Dr. A.K. Pandey, distinguished guests, Learned faculty members and staff of the College, dear students, representatives of Press and Media, ladies and gentlemen!

1. First of all I thank the Dean, College of Horticulture and Forestry for giving me this opportunity to address on the occasion of 16th Foundation Day of this College. It is a very auspicious moment for me to deliver the foundation day address, as I have been associated right from inception of this College to completion of its 15 glorious years of

academic journey. On this very occasion I congratulate each and every one who helped in nurturing this temple of learning.

2. It gives me immense pleasure to congratulate all the meritorious students who received medals and certificates for their significant excellence in academic pursuit. I am well confident that with the same spirit and dedication they will achieve newer height and bring glory to the college. Further, I am very much impressed with the initiative of college to confer the Best Employee Award and also appreciate the employee who is the recipient of Best Employee Award of the College, 2016. On this very occasion, I appeal all of you to serve the organization with extreme dedication.

Ladies and Gentlemen

3. I am proud to say that Indian Agriculture

continues to be a vital component of country's economy contributing over 16 per cent of India's GDP in 2014-15 and providing employment to the majority (55%) of its population. Indian agriculture has achieved self-sufficiency and today takes pride in not only meeting the needs of our population but also playing a major role in agricultural trade. India is one among the 15 leading exporters of agricultural products in the world with significant exports of cotton, rice, meat, oil meals and sugar. Export competitiveness has also been developed in specialized agricultural products like basmati rice, guar gum and castor.

4. You are all aware that the most prominent cultivation practices in these hill states are shifting cultivation (slash and burn), terrace cultivation and also wet land cultivation. It is

repeated that about 5,476 sq km of land is affected by shifting cultivation in NER. The maximum effect due to shifting cultivation (Jhum) has been observed in Nagaland, followed by Arunachal Pradesh, Manipur, Mizoram, and Meghalaya. Shifting cultivation faces criticism due to its environmental externalities, and low productivity but it provides livelihood support to about 4.5 to 5.0 lakh households of this region. In fact, all the hill states of North eastern Region may be called as “land of shifting Cultivators” (*Jhumias*). In Nagaland, shifting cultivation covers over 70 per cent of the total arable area of the state with average jhum area cultivated by a household varying between 0.5 to 2.5 hectares. Alder (*Alnus spp.*)- jhum system is considered to be an ecologically preferred system of Nagaland. ICAR Research Complex, Barapani and its regional centres in different

states, Central Agricultural University and a number of other organizations engaged in agriculture research have tried their best to give better alternative through several integrated models and approaches. Amongst all crops and plants suggested as alternative, I consider horticulture especially promising fruit crops like oranges, quality banana and pickling mango to be very suitable option. I am very happy to see the performance of litchi at this college farm. Now state agency should come forward to for its mass multiplication in large area to fetch good income.

5. In Arunachal Pradesh, apart from production of tropical and sub-tropical fruits, the state has very favourable soil and climatic conditions for production of temperate fruits. You all are aware that country has very paltry area under

temperate horticulture. In this context, we are lucky enough that the state has substantial area for production of temperate fruits. Presently stone fruits like peach, plum and apricot and some fruits like apple, pear and kiwi fruits are grown in small scale but the future is bright and there is great scope for the expansion of area under temperate fruits. At present, there is only one State Horticulture Farm at Shergaon in West Kameng district, which was established in the year 1978. The total area of the farm is 120 hectares, out of which only 40 hectares is under cultivation. The farm also caters the needs for planting materials. Dear students! University has taken decision to establish a Multi Technology Centre and Vocational Centre at Nafra, West Kameng District. I am well confident that this effort will prove boon both for college as well as for the state. This setup will

also help to initiate the work on seed production of temperate vegetables.

6. One of the most important challenges facing humanity today is to conserve/sustain natural resources, including soil and water, for increasing food production while protecting the environment. As the world population grows, stress on natural resources increases, making it difficult to maintain food security. Long term food security requires a balance between increasing crop production, maintaining soil health and environmental sustainability. In India, our traditional nutrient management practices played a major role in accomplishing the enormous increase in food grain production from 52 million tons in 1951-52 to 253.16 million tons during 2015-16. Now, we are realizing the problem of application of

imbalanced nutrients which is adversely affecting the nutrient-use efficiency, making fertilizer consumption uneconomical and producing adverse effects on atmosphere and groundwater quality causing health hazards and climate change. These issues are of much concern in our NEH region, jhum land's soil fertility status has become depleted after years of exploitation with no addition of manures and inadequate management practices. On the other hand, nutrient mining has occurred in north eastern hilly soils due to lack of affordable fertilizer sources and where fewer or no organic residues are returned to the soils, especially under jhum areas. Further, in these soils, N, P, K and S as well as micronutrients deficiencies are principal yield-limiting factors for crop production. In this context, I will suggest faculty of this College to conduct some basic

study on nutrient dynamics and come out with some remedial measure to rectify and manage the deficiency as well as toxicity.

7. The availability of water is going to be a serious challenge due to various reasons. The most serious concern is the growing population which is likely to increase to 1.66 billion by 2050. With the increasing population, the annual food requirement in the country will exceed 250 million tons. The total demand for grains will increase to 375 million tons including grain for feeding livestock. With the growth in the National GDP at 6.8% per annum, during the period from 2000 to 2025 and 6.0% per annum, during the years 2025 to 2050, the per capita income is bound to increase by 5.5% per annum. This will increase the demand of various components of foods including cereals,

fruits, vegetables etc. ultimately there will be an additional demand for water. It is expected that requirement of water for livestock will rise from 2.3 billion m³ in 2000 to 2.8 billion m³ in 2025 and 3.2 billion m³ in 2050. In this context, I want to draw the kind attention of our graduates to bring awareness among the growers to enhance the Water Use Efficiency. As most of the crops in our country are watered through flood irrigation, over 70% of the water used for irrigation is wasted. It is high time that country should convince the farmers to adopt micro-irrigation systems, which will not only reduce the water requirement but also bring down the cost of production, while increasing the area under irrigation. This effort will also boost up the Hon'ble Prime Minister Shri Modiji's wish "*per drop, more crop*".

8. World is moving towards organic agriculture. As per the statistics compiled by the IFOAM and FiBL (2014), indicates that globally 37.5 million ha land (0.87% of total agricultural land) is being managed organically by 1.9 million producers in 164 countries. Besides this, there is another 31 million ha certified for wild harvest collection. Global sales for organic products have reached 75 billion US\$ with US and Europe being the largest consumers. In our country, Sikkim is the first state to officially announce adoption of Organic Farming and the only state of India to convert entire state into organic. On January 18, 2016 our Hon'ble Prime Minister Shri Narendra Modiji inaugurated the Sikkim Organic Festival 2016 near Gangtok. No doubt a number of good things are adhered with organic farming, however, we need concerted efforts to unravel

the various intricate issues from source to sink and quality issue for export of produce.

9. Vertical growth in agriculture in context of burgeoning population is utmost essential and this can be achieved very well by enhancing the nutrient use efficiency, water use efficiency and labour use efficiency etc. Further, to address all these issues, mechanization of agriculture is the only option. For example, sowing of the required quantity of seed at proper depth and uniform application of given dose of fertilizer can only be possible with the use of proper mechanical devices. However, when such operations are performed through indigenous methods, their efficiency is reduced. Thirdly, the time taken to perform sequence of operations is a factor determining the cropping intensity. So as to ensure timeliness of various operations, it

is quite inevitable to switch over to mechanical tools which have higher output capacity and cut down the number of operations to be performed. However, farm mechanization in India has not progressed as desired although presently India is the top producer of four wheeled tractors with growing exports to markets like USA. In reality, Indian agriculture is far less mechanized than that of other South Asian countries viz., Bangladesh and Sri Lanka, similarly within India, the extent of mechanization is extremely varied and there are large regional disparities with Punjab and Haryana possessing the highest levels of mechanization while our North East States are mostly devoid of such progress. On this very occasion, I would like to draw attention of our young students to always be innovative and focus the study on such issues which are highly concerned with the

farming community.

10. Presently, innovation on digital application is drawing the attention of people in almost all spectrums of life, be it agriculture, industry, education etc. In fact it has emerged as one of the most powerful tools to connect each other in the most safest and cheapest manner. Every university, college, public and private institutions engage in research and development activities is interested to transmit their innovation without lapse of time to have significant edge over other rival partners. In agriculture, conventional systems of dissemination of farm information through face-to-face communication by the development functionaries, providing information in the form of printed publications, organizing agricultural exhibitions, etc., have served a useful purpose

but now with the developments in Information Technologies (ICTs), we are now reaching out to the farmers using *M-Kisan* portal for sending information through SMSs, providing e-connectivity to KVKs, *KisanChaupals*, creating a Farmers' portal and establishing a Kisan call centre etc. Thus, it indicates that it is a major challenge before agricultural university how to connect small farmers, entrepreneurs and other implementing agencies located far off. Further, this problem is quite acute in North Eastern Region, where we have very poor connectivity in terms of roads, rails and air links. Keeping these issues in view, Central Agricultural University is keenly interested to equip all its constituent colleges with the latest development in digital application to keep pace with the momentum taking place in the country *vis-a-vis* world.

11. Ethics and values are integral part of

education and it is generally accepted that five universal human values i.e. Truth, Righteous conduct, Peace, Love and Non-violence are directly linked to physical, intellectual, emotional psyche and spiritual facets of human personality. These values are essentially acquired during childhood, first in the home and then at school. This is not a new issue. It has been discussed in different forums from time to time. The National Education Policy, 1986, also emphasized about creating awareness of India's common cultural heritage, social justice and compassion, democracy and egalitarianism, secularism, gender equality, concern for environment, social cohesion and national unity, population and Quality of life, and scientific outlook and spirit of enquiry. These issues are of much concern with the unity and integrity of India. I am proud to say that

CAU has set an example for rest of the institutions of the country where students from all seven states of the region and from other parts of the country seek admission and enjoy academic flavor. Further, ethics and values are most binding things of life and people should respect and inculcate in their habits. And I expect my students to imbibe these values and set an example for others.

I conclude by congratulating the meritorious students, recipient of the best employee award and organizers of 16th College Foundation Day, 2016. Thank You.

Jai Hind!



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