

**Speech of Honourable Governor Dr.K.K.Paul as the Chief Guest  
at the XXXI Convocation of G.B.Pant University of Agriculture  
&Technology, Pantnagar, on November 16, 2017**

**Vice Chancellor, G.B. Pant University of Agriculture and  
Technology,**

**Members of the Board of Management,**

**Members of the Academic Council,**

**Distinguished Guests, Dignitaries**

**Members of the Faculty,**

**Dear Students,**

**Friends from the Press and Media,**

**Ladies and Gentlemen**

Convocations are occasions for celebrations and are a landmark event in the annual calendar of every University.

On the occasion of the Thirty First Convocation of the Govind Ballabh Pant University of Agriculture and Technology, Pantnagar, I take this opportunity to extend my heartiest congratulations to the Vice Chancellor, the faculty, the staff and all the degree and medal recipients, and to all those who have taught and trained them. The G.B. Pant University, the first Agricultural University of the country, is a world famous institution known for its stellar services to the nation, contributing significantly and

substantially to its food security. The success and recognition of Borlaug's work is to a large extent due to the dedication of scientists of this university. In this context, I would also like to quote our Prime Minister Shri Narendra Modi who has said that "Development now depends upon the quality of institutions and ideas".

Despite the stupendous progress made by our country in several scientific and technological areas, agriculture continues to be at the focal point. Materialistic progress has no future without agriculture. One bad monsoon, one poor crop and the alarm bells start ringing.

Agriculture and food security give our civilization, national ethos besides making us a healthy, vibrant, and a happy nation. It is, therefore, important that agriculture remains a profitable proposition for the farmer and he remains attached to the land, otherwise for a country of 130 crores the situation can be really difficult. It is here that the role of Pant Nagar University assumes importance. It has to think and plan ahead according to the future climate forecasts and soil degradation.

Just like other states, agriculture is one of the most significant sectors of the economy in Uttarakhand. It is practiced by a very large number of its people, especially the women. The diversified topography, varied agro-climatic conditions, extreme

variability, and complexity are the characteristics of hill agriculture. The people of the hills practice mixed cropping, while the farmers of the plains in a given season mostly cultivate a single crop. Only 10 per cent of the land in the hills is irrigated as against over 87 per cent land in the plains. Productivity across the hills and the plains for the same crop also differs greatly. The typical feature of hill farming is the scattered and fragmented land holdings that too with an average land holding of around 0.98 hectare. The major concern is the low productivity of crops. The farmers face problems of storage, supply chain, minimum support price and lack of on farm processing facilities. The low yield of, agricultural crops, fodder, forest produce, livestock coupled with shortage of feed and fodder, sluggish growth rates are the critical factors of agrarian hill economy, adversely affecting household food security besides not generating enough money to make it economically viable.

Hill agriculture should be a priority area of development, considering its present state. All the hill states virtually and Uttarakhand in particular, are food-deficit areas. An amazing diversity of ecological niches favourable for a distinctive variety of foods – including tea, off-season vegetables, fruits and vegetable seed production, etc. – places the hill areas in comparative advantage. Many of the foods available from hill agriculture are of specific nutritive and medicinal value and are rare for the rest of the world. Similarly, Himalayan Hills are known for medicinal and

aromatic plants and cultivation of these crops on large scale by a cluster of farmers can turn out to be a boon for them and the Uttarakhand State.

The area also supports advancement in generations of various crops in breeding. Fruits such as apple, peach, kiwi, pear, food grains like millets, pseudo-cereals, and pulses like French bean, kidney bean, and horse gram, as well as some other products of the hills are in great demand everywhere. Uncultivated fruits like *kaphal*, wild apricot, berry, chestnut, walnut, etc. obtainable from natural forests have very high nutritive and market values. Vegetable seeds of temperate origin produced in the hills, are a lucrative source of income. Hill farming communities are livestock-dependent.

Hills are a boon to environment and ecological security. Therefore, our intervention has to be in accordance with inherent natural characteristics of hills. Due to extreme fragility of the hill environment we should especially focus on forest development. Protection, regeneration, conservation and expansion of natural forests in the region will enormously enhance the performance of regional agriculture and ensure conservation of the soil, water and biodiversity.

Ergonomic interventions are required to increase the productivity with reduced drudgery. Though the university has developed some farm equipments, special attention must be given to

hill rural development by further strengthening the R & D activities in the university.

Climate change is one of the most serious global problems. It is a threat to food security and needs a result -oriented action plan. Today, the entire North India is reeling under the impact of the stubble burning by the farmers. I think the farmer is not to be blamed entirely. It is our scientists who have not been able to develop a safer route for disposal of stubble, who should also share the blame, and work towards safe practices for protecting the environment. I think our Agriculture University can play a very important role in this regard.

There is also a need to emphasize and recognize aquatic resources as a part of integrated farming system to boost the income of the farmers.

Farmers or primary producers in the state face many challenges, of both technical and economic nature for which they look at this University for satisfactory solutions. In this context, the specific expectations from the university are, first of all without shedding its All India perspective to now develop or devote itself to Hill Agriculture.

1. Exploring farmer friendly innovative and cost effective technologies for crops and value addition of agri-products including fruits and vegetables, flowers, condiments and spices, medicinal

crops, milk and milk products, meat and poultry etc., particularly for Hill areas.

2. Mapping of fruits, vegetables, flowers and other perishable agri-commodities growing in clusters to enable the processing units to ensure good quality raw material, reduce procurement cost and increase the profitability in long run on sustainable basis

3. Exploration, utilization and commercialization of underutilized indigenous fruit, flower and vegetable crops.

4. Systematic research should be carried out to, generate scientific information on organic cultivation; physiological, bio-chemical aspects of agricultural commodities to develop diversified value added products, characterization, evaluation and conservation of unique and valuable lesser known breeds of livestock .

5. The production performance of 'Badri' cattle (Local Hill Cattle) needs to be evaluated particularly to know the genetic variation for milk production and quality traits.

6. Mechanization of forest operations like planting of saplings, powered pesticide injectors, pruners, forest fire alarm, forest residue and by-product collection, mechanized pine needle collection, log cutting etc should be taken up.

7. Small scale mobile processing units particularly for seed, honey etc. be developed and promoted.

8. Detailed surveys of all the available natural resources (land, water and vegetation) using advanced techniques of remote sensing

and GIS must be conducted to prepare a database of resource inventory in hilly regions of Himalayas.

9. In research, considering the water stress, large tracts of land in the entire country face, it would be useful and practical to develop wheat, paddy, sugarcane and cotton which require less amount of water besides R&D for drip and sprinkler systems.

My dear students, your hard work of years has today culminated into an academic degree. This academic degree gives shape and form to all the experiments you have conducted in your labs, the project reports you submitted, and the assignments you pondered upon. Don't look at this degree as an end to your education. Rather, it should serve as a catalyst for your further pursuits of knowledge. Education is the most powerful weapon which you can use to change the world. Change is the only constant my dear friends. And to keep up with this change, learning should not be seen as an end but as a means to achieve the greater heights in life. You should continuously update yourself with the latest technologies, innovations and the changes the world around is going through. You should aim to be a better version of yourself every day.

I must also appreciate the first prize won by this University from Government of India in Swachh Campus competition. Also

the University has been consistently coming on top in the Universities of Uttarakhand besides it has been able to do good research work resulting in Patents.

Being an outstanding epitome of the agricultural revolution in India, Pantnagar University has to play a lead role in future, as it has always been doing so, in fortifying agricultural processes, following resource conservation as well as biotechnology based approaches. Having made India usher in an era of Green Revolution, this university needs to ensure nutritional security of the country. A food sovereign nation is a free nation in the true sense of the word.

With these words, I once again congratulate the graduates who have received medals and degrees and call upon them to serve the humanity to the best of their capabilities.

**Jai Hind !**

**Thank You**