



જાગૃતી ગરબી

NAVSARI AGRICULTURAL UNIVERSITY

Navsari Agricultural University

Eru Char Rasta, Dandi Road,
NAVSARI-396 450 (South Gujarat)

Third Annual Convocation Address

February 25, 2008

by

Dr. C. D. Mayee

Chairman

Agricultural Scientists Recruitment Board

New Delhi – 110 012

**CONVOCATION ADDRESS TO BE DELIVERED BY THE
CHIEF GUEST, PROFESSOR C. D. MAYEE, CHAIRMAN,
AGRICULTURAL SCIENTISTS' RECRUITMENT BOARD
(ASRB), NEW DELHI ON FEBRUARY 25, 2008 AT
NAVSARI AGRICULTURAL UNIVERSITY, NAVSARI.**

His Excellency the Governor of Gujarat and the Chancellor of Navsari Agricultural University, Pandit Nawal Kishore Sharma, Beloved Mayor of Municipal Corporation of Surat, Dr. Kanubhai Mawani, Honourable Vice Chancellors of Anand, Junagadh, and Sardar Krushinagar Dantiwada, Agricultural Universities, Dr. R.P.S.Ahlwat, Vice-Chancellor, Navsari Agricultural University, Members of the Board of Management and Academic Council, Directors of Research, Extension Education and Students' welfare, Deans of the Faculties, University Officers; Learned Professors and Scientists, Invited Dignitaries; Ladies, Gentlemen and dear students;

At the out set I sincerely express my gratitude, for having invited me to be the Chief Guest of today's auspicious ceremony. I congratulate the graduates, post graduates and doctorates of this historic and beautiful University who are receiving their degrees, honours and medals commensurating with the efforts they have put forth during their academic career. This is one of the most important event in one's professional career from which we march ahead in life. What one achieves normally depend on one's own efforts and ingenuity. Those who pursue their career in the area which suits their temperament would excel and come out on top. I would only say that this is just a beginning of new era

and an appropriate time for transformation or change. It is also time to realize what are the challenges of life that one has to mitigate based on the strength acquired during education. Dear students! you might stop education but please do not cease the process of learning. In science what you learned today in chemistry may be physics tomorrow. What pathology, I have learnt in 1970's is today Biotechnology. The physiology and biochemistry then are molecular biology and genetic engineering today. Hence the learning is a continuous process. The faculty of this University too deserves my compliments. They will feel happy when they will come to know that their students have excelled in all walks of life.

The students, I am sure, will always remember the achievements of their parent insitutions, which has piloted the agrarian growth and development of this region. The revelations of this rural revolutions done in the farm science shall always be helpful to you to tread the path of your profession. The University has excelled in many areas of research and development. With a small beginning of College of Agriculture, the University has fully bloomed now with faculties and colleges. It has made a mark in research on Sugarcane, Nagli, Beans, Pulses, Millet, Banana etc., and in areas of Biofertilizers, residue analysis, organic farming, Biocontrol, PHT and Drip Irrigation Technology. This has certainly benefited the farmers of Gujarat. I wish the graduating students will become university ambassadors to further the interests of the institution and create technology awareness amongst the clientele of Gujarat. I was here two years ago to inaugurate a National

Seminar. I am impressed now that in just two years, you have added several new infrastructures and facilities. You have created facilities of PHT, Residue, Analysis, Biocontrol, ATIC, Girl's hostel, Forestry College, ICT, Guest houses and well knit communications. It is a matter of pride that you have increased your admission capacity, new PG programmes, faculty of Vety. Sciences. I congratulate the Vice-Chancellor and Staff for the efforts they have made to build this institution on sound footing.

Friends, today I desire to deal in the address on the changing scenario of Indian Agriculture and the practical approach in solving the problems through revised focus on education, research and technology transfer. India's transformation in agriculture from ship to mouth scenario to first green revolution is attributed largely to investment in building a large infrastructure by way of series of institutions under ICAR and State Agriculture Universities starting in the early sixties. Commencing with the establishment of Agriculture University at Pantnagar, education, research and extension systems adopted then under land grant pattern certainly paid rich dividends mainly because it had a clear goal of achieving self sufficiency in agriculture. Overhauling the education, research and extension toward the goal of self sufficiency was highly useful. Unwittingly with a few vibrant institutions and SAU's then, we thought the same model will work in ushering second green revolution and hence we created much more infrastructure. Today, we have 41 agriculture, horticulture, veterinary universities, 5 deemed universities around 100 national level institutions, chain

of 558 Krishi Vigyan Kendras (KVKs), ten International Centres for India and several supporting organizations. In spite of this, Indian Agriculture is tending to stagnate as the productivity of principal crops has slowed which is a cause of serious concern to planners. It is also reflected in the recent discussions in the meetings of National Development Council (NDC). The NDC has also rightly recognized that sustaining double digit overall growth of Indian economy, agriculture must aim to grow at higher trajectory of 4.0% annual growth. During the last decade several adverse trends have emerged. Growth rate of GDP has declined sharply and slumped to <18.5% now, whereas population dependent on agriculture has been continued in the range of 58%. As a result per capita income for the people thriving on agriculture is declining. There are series of dialogues on the causes of deceleration of growth in agriculture. Is it technology fatigue or policy fatigue that is contributing to the current situation? Without going into the debate, let us accept that enhancing productivity with profitability and sustainability of agriculture is a real challenge that need to be successfully met. The methods adopted for achieving first green revolution may only partly be helpful now because there are new issues like IPR, Globalization, Environment pollution, Public audit of scientific methods and results, Stagnant resource base, Decline in factory productivity, Loss of biodiversity, Continued pressure of population to feed and Urbanization. In the first green revolution period, research, education and technology transfer (RET) strategies were largely focused, appropriately at that time, on enhancing productivity. However, the same may not

be appropriate now when there are wide concerns for degradation of natural resources such as; land, water, biodiversity, environment which need to be simultaneously addressed for sustainable and profitable growth of agriculture. Therefore, the key challenge before us is to plan and promote strategies that integrate the concerns of enhancing productivity and resource conservation and sustainable use. This calls for new ways of planning, prioritizing and executing our science agenda first through generation of technologies and subsequently through transfer of technologies. Agriculture education is the prelude for research which generates technology for correct use by farmers. Hence, the changed focus on RET planning and execution will be driving force to trigger the second or evergreen revolution in agriculture.

To meet the new challenges of agriculture, let us look into our current education system. As I said earlier, we have grown in size but the quality, technicality and management skills of agriculture manpower has not improved. Today we are producing on an average 11000 graduates in agriculture and nearby 45 per cent of them as post-graduates. Many of them do not return to land obviously for white collar jobs. The impact of IT sector has been so great in coming years that the young minds have set their goals around fortunes instead of fame. The casualness of entering into research field is evident from three year results of ARS-NET. Nearly 20,000 students apply for examination: only half of them appear and 5-10% succeed. Are we losing interest in education and research? It is time to closely move into creating

flexible education system, which must change with the changing demand and create interest. If the system demand specialist in watershed management, we will have to create experts in the area by altering our courses. Today, the demand does not go by Agronomy, Breeding, Pathology etc. but goes by Biotechnology, Water Management, Genetic Resource Management, ICT in Agriculture, IPM, INRM, Organic Agriculture, Precision Agriculture, Environmental Sciences, Agri. Business Management etc. I was very happy that your University has already commenced new courses of practical nature alongwith experiential learning and are looking forward for opening polytechniques to create more technicians. You can now think of opening new subjects like Agro-tourism, Precision Agriculture, Bio-informatics, GRM, Organic Agriculture etc. to attract students to Agricultural Sciences. Let me tell you that unless we make education attractive and demand driven, it will be an outdated system. The Indian Council of Agricultural Research initiated several steps in this direction through AHRD, NATP, Catch-up grant and education reform programmes to catalyze the revival process of education. I wish the SAU's respect it and halt a mere horizontal growth of education.

One of the serious criticism of agriculture research system is the non-collective approach in solving the problem faced by farmers. Our team efforts are often marred by individual egos. Therefore, it is said that although we are individually potential but fail collectively. Unfortunately, for solving problems in current agriculture with complex challenges calls for teams of scientists from different disciplines and organizations to

work together. The way we are organized in science often promotes individual efforts rather than group effort. How can we meet the challenges posed by climate changes, agriculture global trade and marketing, information and communication, IPR issues, biosafety and environment safety, food-feed issues, post-harvest utilization, farmer's income growth, natural resource degradation, and so on ? This would require altogether fresh thinking and change of mind set. Several international organizations are devoting their energies towards regional/global issues where we too have stakes. Several private players are investing in research particularly in areas of input-output utilization. In the light of this, the public research system like in the universities need to redefine its priorities and strategies. Evolving mechanisms to facilitate new ways of working will be an important step in reorganizing research. Simultaneously, research system must focus simultaneously in 'policy generation' alongwith 'technology generation' so that neither technology nor policy fatigues occur in future. One very important element that has emerged in the approach of research is the way 'National Agricultural Innovative Project (NAIP)' is being pursued. Recognizing the need to view the farmers, stakeholders, private players, international groups, NGO's as partners in the process of technology generation, the NAIP projects create the importance of team work at national level. The SAU's can adopt the model at regional /state level to address complex issues of research. Business as usual and '*chalta hai*', '*jane do*' attribute must be abandoned. We should be prepared for a change rather sooner than

later with India '*chak de*' attribute.

In all national level discussions, there is often a subtle comment that the technology transfer, which was so effective in the first green revolution, has failed now. Several models of extensions like, PPP, ATMA, KVK, IVLP, e-Choupal, Agri-clinics, Radio-TV channels, Advisories etc. are being attempted. One thing we must again realize that ToT through Government supported system shall be inadequate although I know Government of Gujarat commenced several new initiatives to rope in University Scientists in participatory research and extension and has successfully done the technology transfer. Increasing yield with sustainability and profitability is a complex challenge as we cannot train a single extension worker in all the areas. Government alone cannot do everything to reach farming community therefore, all the participatory approaches planned shall have to be explored to achieve the desired goal in extension. If a farmer complains that his/her mango plantation is infected by mildew, the paper prescription to him/her to just spray fungicide 5 times shall not solve the problem. It is very clear that such prescriptive process of 'give and take' shall not work any more. It is at this stage relevant to mention that with the fast pace of progress in ICT the farmers will certainly have access to technology but pertinent would be to equip them with knowledge of technologies. We must create centers of 'knowledge dissemination' rather than 'technology dissemination'. Once the farmers are equipped fully, they will judge what is good and what is bad and thus can decide the proper course of cultivation, animal rearing, marketing, PHT etc. The

farmers must be trained on how to select inputs and how to obtain profits from output. Today, the major cause of 'technology failure' is often spurious input, let it be seeds, fertilizers, pesticides, *Trichoderma*, *Amrit pani*, *vermi wash*, nutrient sprays, growth regulators etc, sold to them. Can we not equip the farmers to fight this eventuality when the regulatory machinery fails to do the job. We will have to create diagnostic kits for testing spurious seeds, pesticides and other inputs. The network of KVK's and Agricultural Technology Information Centres (ATIC's) need to be trained for these works. All these institutions should aim to empower the farmers so as to provide him/her access to knowledge that can help to improve not only their farming but also their income efficiency. For ToT improvement if we are serious about lifting the illiteracy of farmers then we have to move from charity to advise to empowerment.

Friends, I wish to draw your attention to the very fact that Indian Agriculture is the largest business for Indians and unless the prosperity of the farming community is achieved through farming, the growth will have no meaning. This is what is referred as second or evergreen revolution where increased productivity has to be coupled with sustainability and profitability. Therefore, challenges of achieving them are complex so also the strategies. The way we can contribute to meet out the challenges is through reorienting our wheel of education, research and extension systems.

I am sure with an excellent track record and infrastructure, this university should be ready in RET system transformation. I would sincerely appeal His

Excellency, the Chancellor of the University, Pro Chancellor and Hon'ble Minister of Agriculture to support the Vice Chancellor of Navsari Agricultural University, Navsari to be the leader first in paradigm shift in the focus in education, research and technology transfer. Once again, I congratulate the degree recipients and add few words of parting advise and wisdom. You have taken education but be remain 'educated' in life; you have learnt lessons of science, but be remain 'learned' while dealing with people, you have graduated but be remain 'grateful' to parents, teachers, friends and the institution and you have become a citizen but be remain 'civilized' in life. I wish you all the success in your career and conclude by quoting the famous rhyme;

Patra Visheshe nyastam I

Gunantarim Shilpama Dhauu II

Jalmiv Samundra Shuklo I

Muktaphalsi Payodasya II

It means; a drop of water when falls in the mouth of a snake turns into poison, when falls in ocean becomes salt but when falls in an oyster becomes pearl. Friends in other words.

"Little drops of water

make a mighty ocean

Little grains of sand

Make a massive mountain"

Turn your small but effective efforts to create big things in life. Wishing you good luck.

Jai Hind