

Integration of Research, Education and Extension

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On this historic occasion of the GOLDEN JUBILEE celebrations of this COLLEGE and INSTITUTE it is fitting that the subject chosen for the conference is a vital one namely Integration of Research, Education and Extension. Looking back with justifiable pride from this important milestone in her long history on her magnificent contribution to the development of Agriculture and her splendid achievements in the application of modern science to the age old methods of plant husbandry shall this Institute rest on her well earned laurels? Or brace herself to the needs of the stirring times in which we find ourselves today under the inspiring leadership of our beloved Prime - Minister? There can be but one answer. She shall march forward to even greater achievements in the future. For this purpose the foremost need appears to be to fuse the three streams of Research, Education and Extension into one well knit mighty weapon that will do away for ever the chronic insufficiency in food and general backwardness of our Villages and usher in a brighter era of prosperity and plenty.

The three branches Sir, are in fact comparable to the three sides of a pyramid and are but different views of one organic whole obtained from different angles as I hope to convince this August assembly before long. Only our thinking has grown tangled so that our task today is rather to reorientate our attitude than actually bring the three branches under a single roof or even under a single administrative head. An advance in one branch automatically and may I add naturally brings corresponding advances in the remaining branches providing that they have always been only one and not three separate entities. When Education is upgraded Research is improved and Extension becomes not only simple and easy but swift and lasting.

Research : During the past 100 years Scientific Research has made more headway than in all the preceding centuries put together with the result that we are today standing on the threshold of a New Age. Undreamt of riches and abundance are looming on the horizon and will soon be in our grasp if we only make wise use of the tools which Science has placed in our hands. Just as we rise with the help

of the ground on which we have stumbled the urgent need of the day is More and Much more of Scientific Research to tide over the critical times that lie ahead. This fact has been recognised in America and a new term the megabuck has crept into the Research programmes signifying smallest unit of expenditure on Science as a million dollars and multiples of the same.

Science Sir, is a jealous mistress. She wants all of you. She wants all of you all the time and if you love the ordinary pursuits and pleasures of life Science has no objection but she quietly moves away. In the higher brackets of Research, the discipline and rigours of Science are in noway inferior to the Commando training imparted at West Point or Sandhurst or the rigid schedule of preparation undergone by the Champions at Wimbledon. Such being their preoccupation the absent minded Professor who boils his watch and carries an egg in his pocket has become a standard joke among lay men. It is not only just but also a policy of Wisdom for the public and the Government to look after their scientist with tender and fostering care rather than leave this relatively helpless people to the mercies of the rules and regulations framed for members of other less exacting services. The long drawn controversy between the rival claims of pure and applied Science have happily been settled and it is now generally recognised that the Government should foster both in underdeveloped countries.

Education: A good Research Scientist will attract Students like honey attracting Bees. Like the seeds in the Parable of the Sower that fell on the roadside and were eaten away by birds a small percentage of student each year will not profit by their studies. But this loss need not cause much worry. But the great organic heart of the vast majority of the students is quite sound and there is no doubt that they will produce abundant and rich harvest after leaving the portals of the College like the seeds in the same Parable which fell on fertile ground. There is no short cut or easy method for the study of Science. If in any system of Scientific Education the student does not put in hard work and painful toil then the product will be cheap shoddy mass produced without the quality of independant and free thought so essential to a Scientist.

The difference between a good teacher and a student is one of degree and not kind. A good teacher does not stop learning even when he gets his degree and his job. On the other hand his thirst for learning and knowledge will progressively increase and he will teach the students by precept as well as the routine methods.

It is fortunate that the Heads of Research Sections with all their unrivalled Library and Laboratory facilities are themselves incharge of teaching in this Institution. The students not only learn their subjects according to the syllabus prescribed by the University but also imbibe the intangible but nonetheless invaluable spirit of Scientific Enquiry pervading the atmosphere of this Institute.

Extension : When Education and Research advance, Extension will not lag behind. The conservatism of the Indian Ryot is fast breaking down and judged by the rapid spread of improved strains, implements, insecticides not to mention the motor bus and the talkie film. It is clear that the ryot wants simple, practical and sound methods of immediate improvement in his own environment rather than imitate blindly methods followed in other countries and other circumstances. The Extension, Sir, is different from the old methods of demonstration and propaganda in that Extension presupposes a two-way traffic. One a stream of practical knowledge hints and improvements from the Institute to his holding and another stream of special technical problems peculiar to his land and holding back to the Specialists of the Institute for investigation, hypothesis, experimentation, alteration, adjustment and finally Solution.

In Conclusion, we hope that the deliberations on this historic occasion under your distinguished presidentship will afford a new orientation to our efforts and lead to complete psychological merger of the three Spheres of work which have only one Aim and none else namely Self Sufficiency or Complete Freedom on the Food Front, for the whole country. We also hope that this ancient land where Learning and Knowledge thrived 5,000 years ago when other countries and Continents were steeped in the darkness of ignorance, this Land ageless in her wisdom but young in her freedom will produce Scientists who will unfurl her flags like Tenzing on the highest peaks of Scientific discoveries and win for her GLOBAL RENOWN AND RECOGNITION.