

Our failures and the reasons
for the same

The neglect of agriculture persisted for several years after independence and what ought to have become our primary industry is still our basic weakness and source of world pity. Even today, the realisation that the quantum of scientific effort necessary to nurture upto maturity the seeds of the agricultural revolution recently sown is not widespread as is reflected by the allocation of less than 10% of our total science budget to agriculture (this percentage is 45 in Australia). If only Indian scientific talent is adequately supported and administrative arrangements ^{are} made to help the farmers to benefit from research, India can soon become a major exporter of rice, milo and wheat.

As a scientist, I feel disappointed that the increased allocation for science during the past 20 years has not resulted in an academically notable end-point. For example, there is a positive correlation between allocation for research and the number of Nobel Prizes won in the United States. Independent India has not produced even a single Nobel prize winner. To me this is an indication of our failure to create an atmosphere of academic freedom and original thinking in our research laboratories and consequently the absence of conditions where the minds of young workers can bloom and give their best. The system of research administration which, like the general administration, promotes servility to superiors and domination over juniors is a major causal factor for this situation.

Highlights of Achievements

As a plant scientist, I consider that our most significant achievement is the generation of a desire for change in age-old agricultural practices. Where sights are limited, action is equally circumscribed. Agricultural advance is an all or none process - a farmer will not take to any one step alone such as killing rats and refrain from applying fertilizer. Most people tend to forget that famines have been recurrent phenomena in our country over many centuries and the great eulogy of food or "Annam" in the Upanishads is probably an index of the preciousness of food even in the Vedic age. In fact, the British established the first Agricultural Department in India only after the Orissa famine of the last century. The motivation for starting in 1905 the Pusa Institute, the first important agricultural research institute in the country, was provided only by a donation from an American intellectual, Mr. Henry Phipps. The lack of interest in the past in making agriculture increasingly independent of nature and controllable by man is also clear from the absence of any important fertilizer factory in the country until the Sindri Unit was established. In contrast, the introduction of fertilizer into European cereal culture dates back to 1850. For agrarian advance and rural prosperity, the inputs and knowledge indicated by science as essential for increasing output, ought to be available and here, much advance has been made in recent years.