

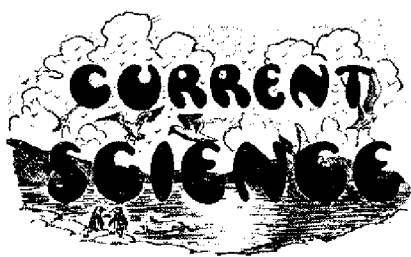
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## FROM THE ARCHIVES



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### Scientific awakening

Professor A. V. Hill's dynamic visit to twelve Indian cities between mid-November, 1943, and early April, 1944, gave much comfort to the scientific community, and he now gladly testifies to the great goodwill universally manifested towards his mission. This lay in acquainting himself with the state of scientific and industrial research in this country, and thus equipping himself to advise the Secretary of State on the organization of scientific endeavour as a part of Indian post-war reconstruction; and on its co-ordination with similar activities in Britain. His report (*Scientific Research in India*. Professor A. V. Hill, Government of India Press, Simla, 1944, pp. 40) is rich in proposals directed towards development of Indian resources in men and material; its interest and importance are outstanding.

Immediately on his return, Prof. Hill procured an official invitation to a group of Indian scientists led by Sir Shanti Swarup Bhatnagar, Head of the Board of

Scientific and Industrial Research, to visit British factories, laboratories and institutions concerned with linking scientific procedure to public needs. This embassy having later journeyed to the United States and Canada, returned to India in mid-February, and it is reasonable to hope that its members may come to be regarded as apostles of a new era; for their unique experience will authorise them to select and urge the adoption of such among Prof. Hill's proposals as they deem best applicable to Indian conditions.

Scientific awakening has come to other nations through the war, and India must not lag behind. Addressing the East-India Association in July 1944 on the results of his Indian mission Prof. Hill gave his emphatic summary in the words, 'Scientific Development or Disaster'. Faced with the standing threefold menace of ignorance, ill-health and malnutrition, India is threatened with the future calamity of a population overflowing the limits of her agricultural resources, because one immediate result of improved nutrition is reduced mortality. 'In quality and calories together India needs at once at least 50 per cent more food than she now has; give her that and her population will increase not by 15 per 1,000 per annum but by 20 or 25 – it is already 20 in the Punjab. Then in 30 years or so the food supply will have to be doubled again, to be three times what it is now'. A threefold increase in thirty years demands a stupendous national effort. New land must be brought into cultivation involving irrigation, and proper maintenance

to avoid erosion. Roads, railways and bridges must be built, and transport multiplied. Wide improvement in the breeding of plants and animals must be effected, and insect-pests mercilessly combated. Soil chemistry must be studied and applied. Every known means for battling waste must be operated, so that all useful ingredients may return to the land. Afforestation must be stimulated, if only to avert the lamentable destruction of cowdung as fuel and redirect it to its proper destination, the soil.

There are many other matters discussed by Prof. Hill in his report, including Indian scientific societies and the various ways in which Government might assist and encourage them; for instance, by purchasing a certain mileage of air-travel for distribution among such bodies. His fruitful, sympathetic and stimulating visit followed by this wealth of practical proposals, will provide abundant material for reflection, discussion and construction during many years to come, the whole event being unique, in the scientific life of this country. In conclusion, it is worthwhile to quote a significant passage in Prof. Hill's preface to the report: 'I have assumed throughout that the scientific method, rightly and confidently used, will provide the framework within which national development will be planned by Indians for India. In their task they can be sure of the co-operation and goodwill of their scientific colleagues elsewhere. No other method can possibly succeed'.

M.O.F.