

Pandurang Vasudeo Sukhatme

1911-1997



Pandurang Vasudeo Sukhatme was born in Budh, Maharashtra, on July 27th, 1911. He matriculated in 1928 from Bhave High School and graduated in mathematics in 1932 from Fergusson College, both in Pune. In 1936 he received his Ph.D. and in 1939 his Doctor of Science degree in statistics from London University. He was a student of three very eminent statisticians – R.A. Fisher, E.S. Pearson and J. Neyman.

During the 1940s, Sukhatme played a leading role in developing statistical techniques that were relevant to Indian agriculture, animal husbandry and fishery. In particular, his most significant contribution was the development of scientific techniques of random sampling in crop cutting surveys for the estimation of crop production. In this endeavour, he became deeply embroiled in a controversy with P.C. Mahalanobis on some of the practical statistical activities that impacted on estimates of total production. Sukhatme made many theoretical and practical contributions, including some on stratified sampling and non-sampling errors. He wrote two text books, *Statistical Methods for Agricultural Workers* (with his close friend, Dr. V. G. Panse) and *Sampling Theory of Surveys with Applications*.

From 1940 to 1951, he was first Statistician and later Statistical Adviser to the Imperial (later Indian) Council of Agricultural Research (ICAR). From 1951 to 1972 he was Director of the Statistics Division at the Food and Agriculture Organization (FAO) in Rome. During this period, he also served briefly as a Visiting Professor in statistics at Iowa State University in 1952, and as Regents Professor at the University of California, Berkley, in 1970. After retirement from the FAO, he returned to Pune and remained there until the end. During this time, he founded the Department of Biometry at the Maharashtra Association for Cultivation of Science and carried out his research on nutrition and allied topics.

At the FAO, Professor Sukhatme had an opportunity to extend the initiatives taken by him in agricultural statistics in India to many other countries of the world. He popularized statistical methods by organizing training programs, sample surveys and other activities on a vast scale. However, his most significant contribution was his conclusion, based on extensive statistical analysis of available data, that the extent of undernutrition was much less than had been supposed. He presented his findings at a meeting of the Royal Statistical Society, and was awarded the Guy (Silver) Medal for his contribution.

Back in India after retirement, Sukhatme convincingly argued that the traditional Indian diet was well balanced and provided adequate protein for anyone who could eat a full meal. Thus, he emphasized, that the real problem in India was undernutrition and not protein deficiency. This view received wide publicity and was eventually accepted at the highest policy levels in the country. He later proposed some biologically plausible models relating metabolic efficiency and calorie intake.

He received several prestigious awards and honours. In 1971, he received the Padma Bhushan award of the Government of India. He was a fellow of the Indian National Science Academy, the Indian Academy of Sciences and the American Statistical Association, and an Honorary Fellow of the Royal Statistical Society. He was also the first recipient of the P. C. Mahalanobis award of the Indian Science Congress Association and the Randhawa Medal of the Indian Academy of Agricultural Sciences.

Professor Sukhatme visited Indian Statistical Institute to deliver address in 13th Convocation held on March 30, 1979.

P.V. Sukhatme passed away on January 28th, 1997.

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