

SUGARCANE IN INDIA—A RETROSPECT AND PROSPECT*

ADDRESSING the Section of Agricultural Sciences, Mr. N. L. Dutt traced the growth of sugarcane cultivation in India. "Sugarcane and sugar have been known in India from the earliest times, philological and botanical evidences indicate that India is the home of sugarcane (*Saccharum Barberi*)." The tropical canes introduced by the East India Company met with failure. "Capt. Sleeman (1827) brought the Mauritius canes to India; he introduced thick canes which belong to *Saccharum officinarum* L., are still being grown in certain parts of the country but on a limited scale and have now acquired local names." The last decade of the nineteenth century saw a revolution in the method of cane improvement in Java and Barbados by the discovery of fertile seed in sugarcane, but "India had to wait for thirty-one years" before she was able to effect cane improvement by "seminal selection".

Mr. Dutt paid tribute to the work of Mollison in Bombay, Woodhouse and Basu in Bihar (during the early years of the work of the Agricultural Department) and the yeoman and pioneering work done by Dr. Barber and Sir T. S. Venkataraman in establishing the Coimbatore Breeding Station and evolving suitable seedling canes benefiting the Indian sugarcane-growers, and added that during recent years the economic canes of Coimbatore—Co. 313, Co. 331, Co. 290 and Co. 419 were intimately connected with the prosperity of the sugarcane industry in India.

As regards the classification of canes, Mr. Dutt opined that "the actual allocation of the indigenous Indian canes" which were good many in number, to specific groups attempted by Dr. Barber has yet to be completed. But from the investigation attempted so far, Dr. Parthasarathy has suggested the probable origin of Indian canes by extensive hybridiza-

tion between *S. officinarum* and *S. spontaneum*. The present position of the taxonomy of *Saccharum* according to Mr. Dutt is that *Erianthus* should be separated from *Saccharum* and that *Erianthus arundinaceum* might be considered as probable source for the origin of the cultivated canes. Mr. Dutt emphasized the necessity for setting up a *S. spontaneum* expedition for studying wild types as it has been of the greatest assistance for evolving economic types, and showed that the geographical trend of distribution of *S. spontaneum* in respect of form with increased number of chromosomes was from north-west to south-east in India.

Mr. Dutt urged the need for a large number of Provincial Sugarcane Stations devoted exclusively for sugarcane work where suitable varieties for tracts should be tested before releasing for general cultivation. He showed how the Stations already established—Muzafarnagar, Gorakhpur, Patna, Bombay and Madras—had done "work of great utility on the varietal, cultural, manurial, cane-growth, sucrose development, embryological and mycological aspect" and "sugarcane soils", but observed the paucity of Cane Development Departments in the Provinces and States. He felt that there was a great necessity for a Cane Development Department in every Province to spread the benefits of research to the ryots scientifically and consistently.

After eulogising the Indian farmer who was not slow in taking up "when once he is convinced of the utility of an innovation," Mr. Dutt concluded that the "work on planned cultivation has only just begun and the Coimbatore canes have begun to contribute to the success of the industry in North India (and now also in Bombay and Madras). The present is, therefore, not an Epilogue but a Prologue for the great chapter on Sugarcane Research, which it is hoped, will be written in the wake of the stabilization of the nascent sugar industry in the next decade."

L. S. D.

* Summary of Mr. N. L. Dutt's Presidential Address to the Section of Agriculture, Indian Science Congress, Delhi, 1947.

SCIENTIFIC MAN-POWER COMMITTEE

THE Government of India have appointed a Scientific Man-Power Committee to assess the Nation's requirements for different grades of scientific and technical personnel during the next ten years and to recommend the steps to be taken during the next five years to meet these requirements.

The personnel of the Committee is as follows:— *Chairman*: Sir Shafaat Ahmed Khan;

Members: Mr. Afzal Hussain, Dr. Homi Bhabha, Sir S. S. Bhatnagar, Dr. K. A. Hamied, Mrs. Hansa Mehta, Prof. Humayun Kabir, Col. K. H. James, Rai Bahadur A. N. Khosla, Sir K. S. Krishnan, Mr. G. L. Mehta, Prof. J. N. Mukherjee, Dr. M. Qureshi, Dr. Birbal Sahni, Wing-Commander H. Singh, Dr. D. N. Wadia, and Dr. S. R. Sen Gupta (Secretary).

The Committee is to report within six months and is expected to meet early in May.