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EDITORIAL

IN MEMORIUM.

We commence this year with a sad bereavement. It is, with great regret and with a sense of irreparable loss that we record the death of Mr. RAM KRISHNA GANGULY, our vice-president. No member has served this Association so valuably and with such steady zeal as he did. Not only did he serve it as one of the secretaries for a considerable period, but as one of the founder members of this Association, he particularly, through its various committees and sub-committees, officially and unofficially, did most of the spade work in its formation and organisation. It was he who with a few others drafted the Memorandum of the Articles of the Association. It was he who provided the large table we have in the Reading Room of our Library. A large part of the syllabus for examinations was drawn up by him. The little pamphlet describing the "Origin and Growth of the Association," published in 1934, was written by him. Even after retirement from his office he did not lose his interest in the Association, but was a frequent visitor to its reading room. He had agreed to give a helping hand towards the publication of this journal in these difficult times and had been elected by the Council as a member of the Editorial Board. Up to the last we had received his encouragement and advice. But before he could take this publication on hand the Almighty Power has taken him away from us, and now we are left with a feeling of loss so deep and so severe that our hearts go out in sympathy to his nearest and dearest ones to whom it is our duty to extend our sincere condolence.

RIVERS OF INDIA

The rivers of India are now receiving a great deal of attention from the Government of India through the Central Waterways and Inland Navigation Commission and it is pleasant to note the great number of ambitious schemes that have been prepared and taken on hand for the control and economical use of available waterflow. Multiple purposes of irrigation, navigation, power development and prevention of, devastating floods, of soil erosion, and of undesirable silt deposition on river beds are being attempted to be served.

It has, at last, been recognised that production of food has been sadly held up for want of sufficient water during the dry seasons in some parts and at all times in other parts of the country. It is realised that irrigation is therefore needed very urgently.

The destruction of crops and homesteads by untimely floods, at irregular intervals, has occasionally spread havoc in many districts and it is therefore desirable that some provision should be made for proper storage and drainage of these flood waters, so that they may be utilised during the dry season at the proper places.

The rise of the bed, the silting up of the flow, and the change in the course of many rivers in the deltaic areas of Bengal are also matters causing much concern. The change in the course is attributed to the looseness of the soil, flatness, and lack of sufficient gradient to cause a flow of water strong enough to remove deposited obstacles. The raising of the bed is attributed to the deposition of silt where the velocity of flow is reduced by the tides twice daily, and the carriage of silt to the erosion of the soil in the upper reaches due to deforestation for building and furnishing purposes and lack of compensating afforestation schemes.

Some rivers of East and Central Bengal in the Delta of the Ganges are rapidly drying up and there are conflicting opinions as to the cause. One opinion is that these rivers were originally offshoots and branches of the Ganges and have at some time been deprived of their source by a sudden or gradual change in the course of the Ganges. Another opinion is that these rivers are not rivers at all but "Canals" that were constructed at some time during the reign of Kings of Bengal when they were cut in a direction almost at right angles to the natural direction of flow of the Ganges and their deterioration is attributed to the neglect of dredging operations.

Whichever may be the correct opinion, it is evident that there is not sufficient flow of water into them from the natural drainage of the soil to remove the silt that is deposited in their beds during tides, and in order to keep them alive they must be fed artificially by damming up the Ganges at a suitable spot, preventing waste of water along its natural course and directing part of the flow into these dying rivers.

The control of the river Kosi which has been frequently changing its course in North Bengal will involve the construction of a Dam over 750 ft. in height, higher than any in the world. But the magnitude of the scheme has not deterred the Government from taking it on hand and we are glad to note that agreements have been arrived at with the neighbouring state of Nepal regarding its interests in the scheme.

Conferences regarding the Damodar Valley project are still in progress and the delay in commencement of the scheme is a cause of disappointment. We realise, however, that much consideration is necessary before entering on any scheme of such magnitude particularly in connection with the Damodar. The advantages and disadvantages of human interference with the course of the Damodar by embankments have been so conflicting that one cannot but hesitate before taking any new step.

Embankments were originally raised to secure the railway lines on the left bank against damage by change of course or floods. But, in effect, they helped to raise the bed by providing a smaller area on which silt could be deposited and actually increased the danger of floods. They also obstructed the drainage of the surrounding land, helped to form pools for breeding of malaria bearing mosquitoes, and thus transformed what was once a health resort into the most dreaded malarious district. Preservation of the embankment on the right bank has therefore been discontinued. But, owing to the existence of the railway on the left, the left embankment is still preserved and, to reduce the effect of floods a drainage canal has been provided near Burdwan. This canal was expected to serve also the purpose of irrigation. But, being primarily an overflow drainage canal, its supply of water comes at a time when cultivators have no need for it and the tax for its maintenance is resented by them. Even as a drainage canal it was not able to cope with the flood in 1943, when the embankment also failed to protect the railway lines. The floods spread havoc among cattle, men and dwellings. But the manure bearing silt it deposited, increased the fertility of the soil and compensated partly for the loss inflicted by the floods. It would be a great advantage if means could be found to distribute the manure laden silt to the required places without flooding entire districts indiscriminately or depositing silt on the river bed.
