This thesis is the result of a long plan. When I taught Economics in 1961-65 I collected materials on the economic development of Assam. Subsequently I got attracted to the study of transport problems of India in general and Assam in particular. I felt that the remoteness of Assam creates some peculiar transport problems which have not so far been studied adequately. The Committee on Transport Coordination (1966) aptly remarked that "it is not generally realised that the field of transport studies has remained comparatively neglected, not only within the agencies concerned with different modes of transport, but also, in its general aspects, in the universities and in research institutions" (Final Report : January 1966: p.173). After much deliberation I finally decided to work upon the present subject. Perhaps G. W. Wilson has rightly stated that 'more attention to regional and local situations is clearly warranted in countries yet to develop a high degree of national integration and typified by islands of relative isolation and independence'. (The Impact of Highway Investment on Development : 1966 : p.215 ). By its very nature the present study is more historical in nature than a study in the economics of transport.
I had an ambitious plan and as such I tried to study all aspects of the transport system in Assam (and the neighbouring areas) since about the last one hundred years. However, I began to realise that this would be too big a subject for a thesis. Hence the study was later on restricted to the present subject.

The thesis has been divided into four parts. The first Part is primarily concerned with historical background. The Chapter on Development and Relative Role of Alternative Modes of Transport in Assam would help one in having an understanding of the impact of railways in the overall transport structure. Part II is an analysis of the impact of railways on various sectors of the economy. In Part III a study of railway freight rates and coordination has been made as it is considered to be essential for adequately appraising the impact of railways as compared to other modes of transport. Having studied the varied aspects of impact an attempt has also been made to establish that the impact of railways in Assam was conditioned to a great extent by operational efficiency and other constraints. Towards the end — in the Part IV — a scheme for increasing railway facilities, which might enable the railways to exert better impact on the economy, has been outlined.

The present study is more concerned with the period from 1947 to 1971. Yet an analysis of the pre-1947 developments and their effects cannot be ignored; these have been given due importance to provide the necessary background. Although in recent times the area of Assam has changed owing to political reasons, for the purpose of this thesis Assam and the neighbouring areas have been taken as what they were immediately after 1947. In this analysis it has been kept in mind that the study of impact would not be complete if a comparative study of the impact on the...
areas is not made as and when occasion arises.

I consider this subject important owing to peculiar position of Assam. After the independence Assam started with a serious transport situation. The Link route became circuitous and inadequate to meet the traffic needs of the Assam area. It appeared that the poor development of trade and industry and the high cost of living were primarily the result of transport condition and freight charges. Rapid development not only of Assam but of the entire north-east Indian region - comprising N.E.F.A. (now Arunachal), Nagaland, Manipur, Mizo Hills, Tripura - is conditioned by an easy, economic and speedy system of transport.

The nature of my study necessitated an extensive field work and I had to visit important places of the then N.E.F.A., Nagaland, Manipur, Mizo Hills and Tripura besides visiting various Chambers of Commerce and important places within Assam. After collecting the necessary data and information from these places and consulting various libraries in Assam (particularly in Gauhati) and in Meghalaya (notably the Record Room at Shillong) I proceeded to Calcutta where I worked in the National Library, the Calcutta University Library and the Library of the Department of Commercial Intelligence of the Government of India. Then I visited the following institutions in New Delhi: the National Archives, the Railway Board, the Directorate of Transport Research, the Planning Commission, the National Council of Applied Economic Research, Institute of Economic Growth and the Delhi School of Economics, in addition to many other offices. A visit to Gorakhpur (office of the North Eastern Railway) enabled me to have some additional information which I could not get elsewhere.

Enthusiasm in my work impelled me to make a short visit
abroad (as a Visiting Scholar on an Exchange Programme on the kind invitation of certain Professors who did substantial work both on economic history of transportation and economics of transport) before finalising my work. I had a memorable intellectual experience at the School of Oriental and African Studies (London), London School of Economics and the Indian Institute Library, Oxford. At London, Oxford and Cambridge I had the privilege of attending certain university seminars and classes and meeting quite a number of experts in the field. Amongst the persons whom I had the opportunity to meet, the names of Professor M.R. Bonavia, Professor G.J. Ponsonby (formerly Sir Ernest Cassel Reader in Commerce with special reference to Transport, University of London), Dr. S. Jby (Chief Economist, British Railways Board), Dr. V. Hogg (of the World Bank), Professor E.A.G. Robinson and Dr. I.M.D. Little deserve special mention. A visit to the British Museum Library and the India Office Library, where I found huge material both in print and in manuscript relating to railway history of India, helped me in realising the difficulty of my task. Later on my visit to the Harvard University (where I utilised the Widener Library and met Professor Hirschman) and my visit to the Massachusetts Institute of Technology, U.S.A. (where I worked in the Hayden and the Dewey Library and met Professors Paul Samuelson and J. Rothenberg) made me conscious of the hazards of my work. The type of impact and problems with which we come across here are to a certain extent different from those that are engaging the attention of experts in developed countries (even in small countries like Holland and France not to mention of America) at this moment. Economists in some of these countries are today primarily concerned with urban transportation (the problems of peak load, congestion...
However, the complexity of any study on transport history or transport economics is universally recognised. Transport is that branch of economics which is inextricably mixed up with politics. Secondly, there is the problem of inadequacy of data relating to a particular region (or a state) within the country, and consequently the problem of quantification. Lacunae in data relating to traffic movements appear to be far more serious in case of road transport. Then, there is the pitfall of wrong conclusion if sophisticated technique (such as the application of linear programming for determination of the saving in cost due to railway) is applied to inadequate data of an underdeveloped area. All these compelled me to follow a methodology in which I had to be content with explanation of facts with simple economic theory and finding out the relationship amongst given variables.

In course of my work I gradually began to realise that: "Routine research will give a routine product. The only kind of research that really advances our working knowledge of the economic mechanism or that really adds to our understanding of the complex structure of our economic society, is research that serves as the tool of the active, questioning and relating mind of the investigator" (Young, Allyn A.: Economics As a Field Research in the Quarterly Journal of Economics, volume XLII, November 1927, p.24). I have no preference for or prejudice against particular methodology. In fact, in addition to relying on vast amount of secondary materials I have meticulously collected or compiled a good deal of original data, as a part of my field work, from various sources. I have also tried to quantify my analysis as far as practicable.
In the Widener Library of the Harvard University, U.S.A., I happened to read a recent article, entitled 'Quantification in History' by W.O. Aydelotte, where the limitation of sophisticated method is aptly emphasised in the following words: "In fact, what is most needed in research of this kind is not the automatic application of certain techniques but, rather, qualities of logic and imagination. The main problems here, as in all research, are not technical and mechanical but intellectual and analytical ... Quantitative techniques, though they may play a crucial role in demolishing previous theories, are usually not adequate by themselves to establish general alternative hypotheses. They are nothing more than a means of deploying evidence ... The greatest hazard in quantitative research is not that of neglecting techniques but that of becoming too much absorbed in them ... It is only too easy to become absorbed in the gadgets and to forget the ideas. The refinement and sophistication of methods though desirable in themselves, can become a kind of escapism, an evasion or postponement of the intellectual tasks that must ultimately be faced". R.W. Fogel has also emphasised that "The misuse of quantitative methods and hypothetico-deductive constructs will be minimised when they are applied by scholars deeply immersed in the materials of history. Only the scholar who knows what is unique, special, and particular about a given historical problem can successfully adapt powerful general methods to the study of that problem. The casual interloper cannot possess this knowledge". (Railroad and American Economic Growth : 1964 : p.249)

In this work when certain impacts are attributed to the development of railways, it is taken for granted that other causes have also played their parts: the interaction of other forces has
not been denied or ignored. All these considerations have made the task of quantifying the exact impact of railways on this particular State (or area) difficult - more difficult than that in case of the whole country. Perhaps P.D. McClelland is right when he states that "in both (Fogel and Fishlow's) works can be found a wealth of information concerning railroads and the multitude of strands that run between this single innovation and the fabric of American development. Their central question, however - the net benefit to the economy from the existence of the railroad in 1859 or 1890 - remains essentially as they found it: an unsolved mystery". (The Journal of Economic History, volume 28, March 1968, p.123)

During the period of my research work I had the pleasure of meeting many persons and visiting many places for collection of materials. I am indebted to many institutions: particularly to the Government of Assam for permitting me to carry on research and granting me leave and financial aid to go abroad, to the Gauhati University and to the N.F. Railway Office for offering me necessary facilities. Innumerable persons, whose names it has not been possible to mention here, helped me at various stages of my work: I am grateful to all of them. At last I express my deep sense of gratitude to Dr. S. N. Mehrotra, Head of the Department of Commerce, for his encouragement, supervision and help, without which it would have been difficult to complete this work. I also like to acknowledge gratitude to the University Grants Commission for rendering me material help - a Fellowship and Travel Grants - during the tenure of my research work.

Gauhati
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(Shyam B. Medhi)