

CHANGING AGRICULTURAL SCENARIO

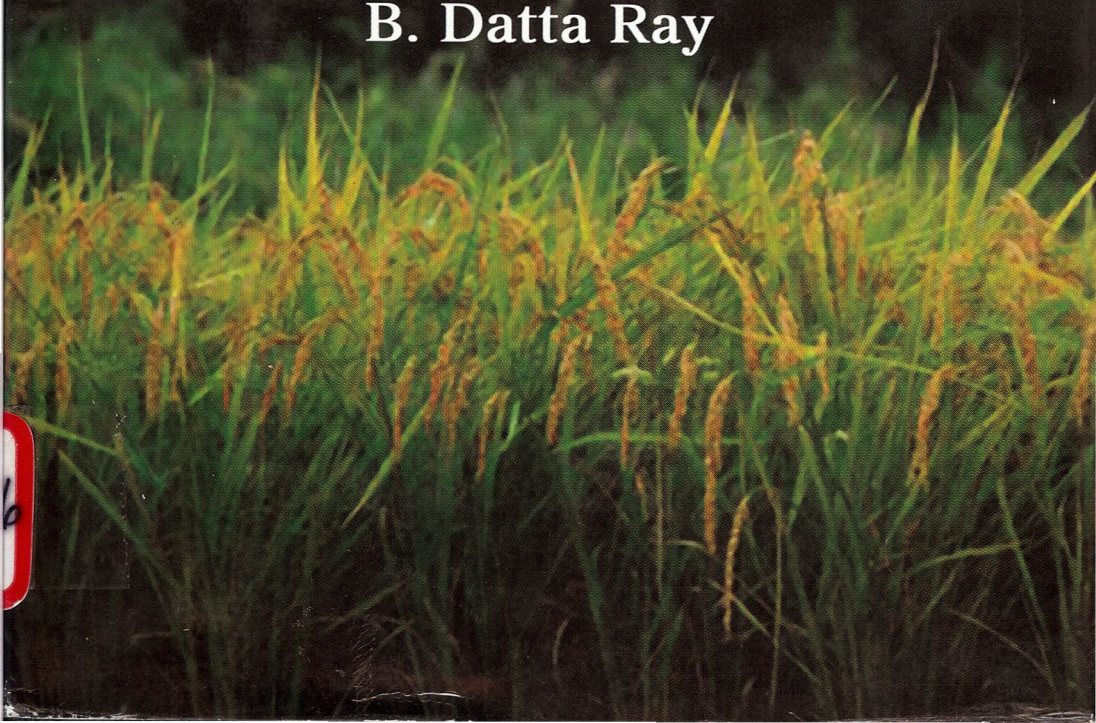
In

NORTH EAST INDIA

Edited by

Bimal J. Deb

B. Datta Ray



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**CHANGING AGRICULTURAL
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IN
NORTH-EAST INDIA**

Edited by
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FOREWORD

North East India is endowed with rich natural resources of good soil and climate. But because of some social and economic constraints, and for some biophysical limitation, the land resources are not being used properly for agricultural development.

In all the hills, the land system is governed by and large by traditions and customs. Assam, Tripura and Manipur have codified land laws and manuals relating land ownership.

In the hill areas, the terrain is difficult and fertility of the soil is low. There is the problem of soil erosion because of heavy rains and inputs are meagre and primitive. Nearly 80 per cent of the population of the hill areas are hardly able to raise the minimum of their food requirements.

The problems of agriculture in North East India are manifold. The lack of uniformity of soil condition, the continuance of the practice of shifting cultivation in wide areas, the absence of irrigation facilities, the serious problem of flood affecting large areas of agricultural land and the lack of marketing and credit facilities for the agricultural produce are only few of them. The scope of large scale mechanisation and wide use of electric power for agricultural development in the region is very limited. Agro-industrial development in North East India is a distant dream.

The economy of North East India is dominated by primary sector, that too of the rudimentary nature with small land holdings due to continuing fragmentation of land over time as a consequence of population pressure.

There has been a changing agricultural scenario with some vital inter-related issues like land-use, land relations, land reforms, landless labourers emerging. The politics of land reform constitute an integral part of the scenario. A rational solution of these issues will help agricultural development. Agriculture in both plain and in the hills of North East India has been undergoing some changes in the last two decades. This changing agricultural scenario is affecting

population growth, migration and health of the rural people. We need to take an integrated approach to the multidimensional problems of changing agricultural scenario. The introduction in limited scale of modern technology in agriculture has brought about some changes in crop pattern and production in different areas of North East India where both settled and shifting cultivation are practiced. The social and economic background of the peasants and the ecological characteristics have to be given due weightage for understanding the degree of change and sustainability of gainful agriculture.

North East India Council for Social Science Research, the premier social science research organisation of North East India held a two-day seminar on Changing Agricultural Scenario in North East India on 12-13 December, 2004. His Excellency Mr. M.M. Jacob, Governor of Meghalaya, inaugurated the seminar. We thank him for his help and patronage.

Professor K. Alam, Professor T.B. Lahiri, Mr. S.K. Tewari, Professor B.C. Bhowmick, Professor A.C. Mahapatra and Professor N.N. Bhattacharya presided over the academic sessions. Professor Keya Sen Gupta, Dr. Sutapa Sen Gupta and Dr. Sushmita Das were rapporteurs of the seminar. We would like to thank them with our gratitude.

We take this opportunity to thank profusely Mr. C. Pynghope, Mr. S.K. Tewari, Mr. B.K. Dev Varma, Mr. P.C. Chakraborty, Mr. S.S. Gupta, Mr. K.L. Tariang, Mr. B.K. Panda, Mr. S.K. Sen and Mr. B. Dutta of the administration and Government of Meghalaya for their support and help to make the seminar a great success.

27th January, 2005

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North East India Council,
For Social Science Research,
Shillong

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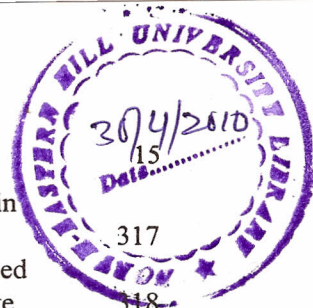
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INTRODUCTION

The state of agriculture in North-East India along with its potentialities and development thrust has been an inseparable part of the planning process over the years, a fact which initiated administrative measures for necessary impetus and some alternative strategies, wherever needed, for productivity and diversification. The North-Eastern region's identity is characterised by diverse geological, physiographic and agro-climatic features and except in some parts of Assam, Manipur and Tripura, the landscape is not alluring for cultivation. As a result, agro-climatic advantages which generate potentialities for cultivation of various types of agricultural and horticultural crops are overshadowed by drudgeries associated with field work. In addition, certain extreme agro-climatic conditions such as high rainfall, high humidity and low winter temperature also negate developmental efforts.

Today, agricultural economy of the region is on the brink of backwardness and stagnation aggravated by infrastructural bottlenecks, institutional weaknesses and technological lag. The factors which traditionally hampered agricultural productivity whether in the plains or in the hills have remained, by and large, unaddressed. No wonder, the persistence of traditional subsistence economy and rural poverty go hand in hand in most parts of the region, some of which are further affected by intra-regional disparities. It is difficult to ignore the fact that when governmental commitment to support agricultural process was at its height, the North-Eastern States could not rise to the occasion to give impetus to productivity and alternative choices. This was particularly true in the yester years of planning and nation building when the beginning could have been made in eventually releasing the economy from the vortex of stagnation. Now with the ascendancy of neo-liberal state, any expectation of massive state support has receded to the background. Nevertheless, agriculture remains the focal point of Indian planning. A growing awareness exists in different States of the region on the imperative

need to overcome the impediments to agricultural development and make the economy self-reliant and vibrant so as to reduce its dependence on the rest of the country. However, a clear strategy is yet to evolve. As a first step, a macro-management approach through integration of 27 Centrally Sponsored Schemes has to be given a fair trial. In the changing scenario, agricultural development and food security are closely interlinked and in the ultimate analysis there is no better option than sustainable agricultural development.

Out of 2.55 lakh square km of the region, as low as 0.33 lakh square km is engaged in agriculture which forms 12 per cent of the total area. At the same time, of the 10.6 million main workers in the North Eastern economy, about 8 million are directly engaged in agricultural pursuits as cultivators and agricultural labourers. It is revealing that of the 22.5 million hectares of the region where land-use pattern is recommended, only 16.5 per cent (3.72 million hectares) is the net sown area for the purpose of cultivation. Significantly, a considerable large area of the region comes under shifting cultivation and the total number of families practicing shifting cultivation is about 4.4 lakhs. It may be stated that cropping intensity is 1.4 and the gross cropped area turns out to be 5.2 million hectares. In assessing the region's agricultural productivity, what is of great importance is the fact that the area covered by irrigation is negligible and it has been estimated that only 16 per cent of the gross cropped area is irrigated. The rest however remains embedded in the gamble of monsoons. At the same time, consumption of fertilisers is unusually low which is about 9.5 kg per hectare of gross area sown as against 67 kg per hectare at the national level.

In the North-Eastern Region, the share of agriculture in Gross State Domestic Product (at constant 1993-94 prices) varies from 20.17 per cent in Manipur to 30.5 per cent in Assam which undoubtedly corroborates the prevalence of subsistence economy. A fact which makes the situation so obvious is the pre-dominance of small and marginal farmers (about 80% of total holdings). Situation is worse in Assam where 83.12 per cent of total holdings are small and marginal operating upon 44.33 per cent of holdings. Inevitably, there is low agricultural productivity. An example from Assam shows that the yield of foodgrains per hectare in 2001-02 was 1,465 kg compared to 4,040 kg in Punjab.

According to one estimate, nearly one-sixth of the rural families in the region is landless and nearly one-half of the farmers including the landless hold less than ten bighas per family. It is well known that the average size of holdings is an important variable for agricultural sector. In the prevalent situation, mechanisation of agriculture through adoption of modern farming practices is ruled out. Further, roughly 28 per cent of the region's area is plains and the remaining 72 per cent is covered by mountain plateau and hills. At the same time, in the promotion of agricultural development land reforms initiated in the plains have so far been half-hearted, the hills remaining out of its purview out and out.

All this has had the cumulative effect of perpetuating low productivity giving no scope whatsoever for commercial surplus. Each State of the region has deficiencies peculiar to its terrain, fragility, inaccessibility and marginality of hill and mountain ecosystem coupled with traditional land-use system. In fact, six agro-climatic zones form the primary basis for development of agriculture in the region. Hence, a concerted move at the regional level may have the desired effect of ushering a common orientation to land-use and cropping pattern in the region. It is generally acknowledged that there are two ways to increase the production: increase in either productivity or cropping intensity. However, intensive farming with yield improvement strategies, crop diversification, development of cash crops and high valued crops hold the initial key to development of agriculture. Any such effort has to be supported obviously by institutional credit support, marketing facilities and input delivery. Further the abundance of ground water can easily facilitate a viable irrigation mechanism to guarantee higher yield. In fine, the emphasis has to be on ensuring a higher quality of life through maintaining a balance between productivity function and conservation activities.

This book is the outcome of joint efforts by academicians, planners and agricultural scientists to highlight the agricultural potentialities of the region against the backdrop of half-a-century of planning.

BIMAL J. DEB
B. DATTA RAY

The twenty-six papers in this volume, presented at a national seminar, organised by the North-East India Council for Social Science Research, Shillong, take stock of the state of agriculture in North-East India. Analysing the impact of recent agricultural changes on population growth, migration and health of the rural people in the region, the contribution address a variety of issues concerning crop diversification pattern, land size and productivity, land-use pattern, land ceiling, agrarian reforms, and the role of women in agricultural sector. The book will be of great use to researchers and policy-makers.

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B. Datta Ray is a freedom fighter and a social scientist. He is Founder Secretary of North East India Council for Social Science Research. He has to his credit two books, namely, *Administrative History of North East India and Tribal Identity* and *Tensions in North East India*. Also, he has edited 17 books on North East India.

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