

Rural Development
in India

—
Challenges
and
the Tasks Ahead

Editors

Bedabrat Saikia | Shrinibas Jena

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To
Our
Parents

Preface

"The future of India lies in its villages"

—M. K. Gandhi

"Almost half of the population of the world lives in rural regions and mostly in a state of poverty. Such inequalities in human development have been one of the primary reasons for unrest and, in some parts of the world, even violence."

—A. P. J. Abdul Kalam

Rural development is a process of improving the quality of life and economic well-being of people living in the rural areas, often relatively isolated and sparsely populated areas¹ (Moseley, 2003). Rural development is an all-encompassing term, emphasizing both on the economic as well as social transformation focusing on the actions for the development of areas outside the mainstream urban economic system. It strives at finding ways to improve rural lives, socio-economic development of the rural communities and participation of the rural masses in overall up-liftment process. A bottom-up approach proves to be successful in mitigating rural backwardness. But what defines a rural area? The term rural area connotes a geographical area located outside the towns and cities² (Ricketts, 1998). However, the definition varies across countries and continents. Almost every economic, social and political organization of the world has a separate definition with different parameters. The dictionary meaning (Webster's Dictionary) of 'rural' is 'of' or 'people living in countryside'. In India, the word 'village' is largely and interchangeably used for 'rural area', characterized by low population density and agriculture as its chief source of livelihood. The Planning Commission of India defined it as a town with a maximum population of 15,000 and governed by a Panchayat. RBI describes rural areas as those areas with a population of less than 49,000 (tier-3 to tier-6 cities). The National Sample Survey Organisation (NSSO) states 'rural' as follows which is by far the most acceptable definition in India:

¹ Moseley, Malcolm J. (2003): Rural Development: Principles and Practice (1. Publ. ed.). London [u.a]: SAGE. P.5. ISBN 978-0-7619-4766-0.

² "Definitions of Rural: A Handbook for Health Policy Makers and Researchers" (PDF). (6.12 MB) Thomas C. Ricketts, Karen D. Johnson-Webb, Patricia Taylor. Chapel Hill: North Carolina Rural Health Research Program, Cecil G. Sheps Center for Health Services Research, University of North Carolina, 1998. 13 p.

- An area with a population density of up to 400 per square kilometre.
- Villages with clear surveyed boundaries but no municipal board.
- A minimum of 75% of male working population involved in agriculture and allied activities.

The need for rural development in India was a long felt concern which saw radical changes in the form of Constitutional status to the Panchayati Raj Institutions through the 73rd Constitutional Amendment in 1993. Economic development was shadowed during the colonial era which deepened the gulf between urban and rural areas and its populace. Shortly after India's independence, thrust for development was laid on agriculture, industry, education, health and communication. But very soon the need for a dedicated agency specifically targeted for rural development was felt. In October 1974, the Department of Rural Development was created as a part of Ministry of Food and Agriculture. On 18th August 1979, the Department of Rural Development was elevated to the status of a new Ministry of Rural Reconstruction. It was renamed as Ministry of Rural Development on 23rd January, 1982. In January 1985, the Ministry of Rural Development was again converted into a Department under the Ministry of Agriculture and Rural Development which was later rechristened as Ministry of Agriculture in September 1985. On 5th July, 1991 the Department was upgraded as Ministry of Rural Development. Another Department viz. Department of Wasteland Development was created under this Ministry on 2nd July, 1992. In March 1995, the Ministry was renamed as the Ministry of Rural Areas and Employment with three departments namely Department of Rural Employment and Poverty Alleviation, Rural Development and Wasteland Development. Finally, in 1999 Ministry of Rural Areas and Employment was renamed as today's Ministry of Rural Development.

As per the 2011 census in India, of the 121 crore Indians, 83.3 crore live in rural areas while 37.7 crore in urban areas. The rural-urban distribution is 68.84% and 31.16% respectively. The urban population in India, according to 1901 census, was 11.4% which increased to 28.53% according to 2001 census, and crossing 30% as per 2011 census, stood at 31.16%. In 2017, the numbers rose to 34%, according to the World Bank estimates. By 2030, 40.76% of the country's population is expected to reside in urban areas as projected by UN State of the World Population report in 2007. This migration to urban areas exacerbated due to the development of the private sector and a better standard of living in urban areas and more so after India's adoption of the Economic Reforms in 1991. Nevertheless, to ensure that the fruits of economic reforms are shared by all the sections of society, five elements of social and economic infrastructure, critical to the quality of life in rural areas, were identified which are health, education, drinking water, housing and roads. It is needless to say the extent of governmental support in bridging the rural-urban gap. Rural development occupies a considerable share in the country's budget. For example, budget allocation to the department of Rural Development for the financial year 2017-18 was Rs. 105447.88 crore while it rose to Rs. 112403.92 crore during the financial year 2018-19. However, in spite of several rural development programmes, policies, schemes and a huge budgetary allocation, some regions fair well than others.

The idea of publishing the book titled "*Rural Development in India: Challenges and the Tasks Ahead*" is a noble attempt to bind the research findings on various aspects and issues of rural development and issues in contemporary India. It is expected through this volume to highlight the rural challenges and act as a path bearer for future researchers and policy makers for systematic rural development planning.

Opening with the paper on *Farm Size Change: A Farm Level Investigation to Overcome its Impediments in Rural Assam* of Dr. Anjan Bhuyan and Haripriya Dutta the stage is set for discussion on the farm size change as an impediment to sustainable agriculture in rural Assam. Through an investigation of 600 paddy farming households of Assam, it is identified the determinants responsible for farm size change (both increase as well as decrease). Further, they have suggested the policy makers to exert control over the determinants of farm size in the State so that a desirable farm size pattern can be formed through wilful participation of the households.

In rural India, agriculture is the chief source of livelihood. V. Zothankhuma through his paper on *Agricultural Land Use and Rural Development in Mizoram*, throws light on the present agricultural scenario of the State and its diminishing share in Gross State Domestic Product (GSDP). He highlights the environmental risks associated with shifting cultivation and the initiatives taken by the government in reducing such risks and channelizing the people engaged with it.

Dr. Joben K Antony through his study entitled, *The Economics of Organic Farming in Kerala* has discussed the economics of organic farming and to measure the productivity, profitability and cost effectiveness of the organic agriculture for a sustainable environment in selected farm blocks of Wayanad and Idukki districts of Kerala. Based on a survey of 300 organic farmers and 120 non-organic farmers, study acknowledges that Wayanad and Idukki are the largest coffee and pepper producer in Kerala. The coffee and pepper cultivation plays a vital role towards socio-economic development in the rural areas by mobilizing rural resources and generating higher income and employment opportunities in these districts.

Bidyut Jyoti Kalita and Dr. Anjan Bhuyan in their paper on *Socio-Economic Issues of Jute Farmers from the Perspective of Livelihood Creation in Assam: A study* exposes the pitiable socio-economic conditions of the jute farmers in the region and how they struggle to maintain their livelihood. Based on the findings from primary data, it is observed that jute farming still holds considerable relevance among the agrarian communities of Assam and in order to ensure inclusive growth of these vulnerable segments of the society, their socio-economic issues need significant attention from concerned stakeholders from a holistic perspective.

Dr. Jublee Goswami in her paper on *A Spatio-Temporal Analysis to Identify the Present Status of Eriiculture in Assam* describes about the prospects and present scenario of ericulture in the economy of Assam. Eriiculture has a huge prospects to foster economic development through raising employment and supplementary income. Stretching over a period of five years from 2011-2015 and concentrating on eight districts of the State, the study finds stagnancy and decreasing trends in ericulture activity of the State.

In their paper Dr. Dip Jyoti Haloi and Dr. Innifa H Haloi have tried to portray aquaculture as the emerging driver of rural economy in India by emphasising that of Assam. Blessed with a sub-tropical climate and numerous water bodies, Assam is endowed with valuable fishery resources. Sustainable utilization of available resources with appropriate scientific farming approaches will increase fish production, generate employment opportunities and earn export revenues. It is seen that the production of fishes are mainly based on capture fisheries rather than culture fisheries and hence a gap erupts between demand for fish and production of fish. The authors urge the government to interfere in bringing improvised technologies to the farmers and other stakeholders for holistic development of the fishery sector and improve the socio-economic condition of the farmers of the State.

Dr. Shrinibas Jena's study identifies the huge potential of fishery as a source of rural livelihood in Odisha. The study shows the bright scope for foreign exchange earnings through marine fish product exports since the volume and value of exports of marine fish has been increasing over last three decades. Fishery has positive impact on income of rural population of Odisha.

Dr. Pranab Bujarbarua and Prabal Sen have attempted to highlight the important issues and concerns in respect of trade & commerce and sustainable management of non-timber forests products (NTFPs) of North East India with special emphasis on medicinal and aromatic plants. The study further tries to bring out the important issues and concerns on the medicinal and aromatic plants of North East India emphasizing on their economic status, conservation and sustainability issues.

In their paper Urmi Pattanayak, Dr. Minati Mallick and Dr. Tarun Kumar Ojha examine the role of financial institutions on the input supply in agriculture in the Indian context. Being the main-stay of life for majority of the Indian population about two-thirds of the country's workforce is directly engaged in agriculture for its livelihood. But, the most notable constraint faced by the farmers is access to farm inputs mainly due to their poor financial status. The study assesses the trends of agricultural production and inputs used in agriculture in India during the period 2000-2016.

Ankita Sarmah, Dr. Bedabrat Saikia and Dr. Dhananjay Tripathi have attempted to examine if MSMEs helps in employment generation and also to analyse some of the important constraints to the growth of the MSMEs in Assam. Micro Small and Medium Enterprises (MSMEs) are eventually gaining prominence and becoming important driver of economic growth and development and most importantly for a developing state like ours. The MSME sector is found to be the fastest growing sector in the State in terms of output, employment, investment, number of units, etc. Furthermore, financial constraint is listed at the top by both women and male MSME owners as the prime growth constraint. Hence, these constraints identified, if not answered in time will become challenges for the government in subsequent period, severely affecting the MSMEs.

Lalnunthari analyses the health care scenario in Mizoram which is mostly targeted for the rural population. The study investigates the implementation and achievements of both, national and domestic health programmes in Mizoram. She further concludes

her study by offering valuable suggestions for the improvement of health care system in Mizoram.

In their paper Dr. Khirod Kumar Phukan and Dr. Mahendra Hazarika explore the pattern of income, expenditure and savings of Self Help Group (SHGs) in the Narayanpur development block of Lakhimpur district of Assam. Based on the primary data collected from the SHG members of six Gram Panchayat in the study area, the study is an endeavour to estimate the economic impact of SHGs under Swarnajayanti Gram Swarojgar Yojana (SGSY) programme of the government of India.

Kuntala Dutta and Dr. Mandakini Baruah in their work intends to look at the everyday life of women through the lens of Self Help Group (SHG) and it tries to see how SHGs play a pave-making role in connection with the rural development. They have tried to analyse how these SHGs are promoting better economic condition for women as well as a significant space in their families, in particular, and in the society, in general.

Bijit Debbarma and Pranab Jyoti Neog in their paper on *Rural Women of Assam: Employability and Empowerment through Skill Development Training* discuss at lengths about the low skill of rural women and how proper and dedicated skill development trainings can provide meaningful employment, empowerment and sustainability.

Dr. Gopabandhu Mohapatra has studied the determinants of women participation in MGNREGS in Khaira Block of Balasore district of Odisha. The development trajectory of MGNREGS may be highlighted as it has currently ushered in a cognitive shape in assuring employment in general and women in particular. The study has revealed that the level of household income, dependency ratio and land holdings constitute significant factors that determine women's participation in MGNREGS.

Ranjan Kumar Panda's paper attempts to show the status of fiscal health of Odisha during the period 1990-91 to 2018-19. The study finds that the fiscal imbalance has been corrected through elimination of revenue deficit in 2005-06. The surplus in revenue account has been maintained from 2005-06 till date. Fiscal deficit could also be contained within 3 % of GSDP. Debt-GSDP ratio came down significantly from 56.08 % to 20.73 in 2018-19. Tax- GSDP ratio has remained 5% - 6 % during 2002-03 to 2010-11 and increased marginally to 8.76% in 2018-19.

Dr. Antiarbum Ranglong through his paper attempts to analyse the tribal development schemes that are being implemented in Tripura with special focus to those schemes implemented by Tripura Tribal Areas Autonomous District Council (TTAADC), and the challenges being faced in the process of implementation.

Good Governance and Panchayati Raj Institutions (PRIs) which are the bedrocks of rural development has been dealt in lengths by Dr. Apurba Saikia in his study on Assam. A State where 98.4% of total geographical area is rural and where 86% of the population lives in rural areas, the study attempts to highlight the necessity of good governance in the PRIs & District Rural Development Agency (DRDAs), Community Blocks, etc., for rapid development of the State in general and rural areas in particular.

Dr. Javaid Iqbal Khan highlights the policies and strategy for rural development of Jammu and Kashmir through his paper *New Rural Development Paradigm: Delivering Effective Rural Development in Jammu and Kashmir*. His study proposes an alternative institutional and policy framework for delivering efficient rural development in the Himalayan state. His proposed framework seeks a reorientation of policy and restructuring of the 'practice' of rural development. The novelty of Khan's work lies in its focus on reorganization at the existing institutional level and identification of a micro-region development strategy for the state of Jammu and Kashmir.

Dr. Hiranmaya Sharma through his study explores the role of traditional beliefs in the sustainable rural development of Arunachal Pradesh. The rural people mainly depend on local resources including agriculture, fishing and hunting. The tribes included in the study worship the spirit of animals, plants and soil in various forms and perform various rituals to please them. They believe that upon offending these spirits, they may release their wrath upon the villagers, which may lead to disease and death in the village. Specific rituals are also performed, in order to seek excuse from the supernatural spirits. Such beliefs related to animals, plants and other natural resources play a significant role in sustainable resource utilization in the rural development processes in the villages of Arunachal Pradesh.

Dr. Dilip Kumar Bhuyan sheds light on the nature and role of different Autonomous Councils (Mising, Tiwa, Deuri and Thengal Kahari Autonomous Council) on its respective tribal development in Assam. The Autonomous Councils as recognized by the Constitution of India are expected to play a pivot role in the tribal development. But the study indicates that the Autonomous Councils of the Mising, the Tiwa, the Deuri and the Thengal Kachari hardly accomplish the aspirations of the tribal communities in Assam. While undertaking the study, Bhuyan has been into consideration the dimensions of development including economic activity, education, and psychic make up, aspirations of saving habit, political participation and women empowerment etc. He has also found an essential link between education and autonomy with the process of development.

Finally, Dr. Gobin Chandra Boruah vividly discusses the problems of unemployment and underemployment in rural Assam. The paper targets to find out the extent of employment, unemployment and under employment in rural Assam and also tries to estimate the different working activities engaged by the workforce, available in the rural area.

It's a cliché to mention that in-spite of innumerable efforts; perceptible changes have not been seen in the rural development of the country. The scenario changes from region to region in a vast country like India. Spread across twenty-two chapters, this book is an amalgamation of various ideas and evidences of rural development in India. The present study provides new and motivating knowledge, otherwise lesser known and understood. It is hoped that this book is not only an addition to the existing literatures on rural development of India, but also useful for policy makers, planners, researches and all those who have interest in the rural & regional development. The

intimation of errors and serious misprints will be most gratefully received and duly incorporated in the subsequent edition.

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Guwahati

Bedabrat Saikia

Shrinibas Jena

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List of Contributors

1. **Dr. Anjan Bhuyan**, Associate Professor, Department of Business Administration, Tezpur University, Assam
2. **Ms. Ankita Sarmah**, Research Scholar, Department of HSS, NIT Sikkim, Ravangla, South Sikkim, Sikkim
3. **Dr. Antiarbum Ranglong**, Assistant Professor, Department of Public Administration, Maharaja Bir Bikram University, Agartala, Tripura
5. **Dr. Apurba Saikia**, Principal, Furkating College, Golaghat, Assam
6. **Dr. Bedabrat Saikia**, Assistant Professor, Department of Economics, Handique Girls' College, Guwahati, Assam
7. **Mr. Bidyut Jyoti Kalita**, ICSSR Doctoral Fellow, Department of Business Administration, Tezpur University, Assam
8. **Mr. Bijit Debbarma**, Director (Academic), Xavier Institute of Management & Information Technology, Bamunimaidan, Guwahati, Assam.
9. **Dr. Dhananjay Tripathi**, Assistant Professor, Department of HSS, NIT Sikkim, Ravangla, South Sikkim, Sikkim
10. **Dr. Dilip Kumar Bhuyan**, Assistant Professor, Department of Sociology, Kherajkhat College, Deotola, Lakhimpur, Assam
11. **Dr. Dip Jyoti Haloi**, Assistant Professor, Department of Zoology, Handique Girls' College, Guwahati, Assam
12. **Dr. Gobin Chandra Boruah**, Assistant Professor, Department of Economics, Lakhimpur Girls' College, Khelmati, North Lakhimpur, Assam
13. **Dr. Gopabandhu Mohapatra**, Reader, Deptt. of Economics, Khaira College, Khaira, Balasore, Odisha
14. **Ms. Haripriya Dutta**, Research Scholar, Dept. of Business Administration, Tezpur University, Assam
15. **Dr. Hiranmaya Sharma**, Assistant Professor, Department of Zoology, Dera Natung Government College, Itanagar, Arunachal Pradesh
16. **Dr. Innifa H Haloi**, Assistant Professor, Department of Zoology, Handique Girls' College, Guwahati, Assam
17. **Dr. Javaid Iqbal Khan**, Assistant Professor, Department of Economics, University of Kashmir, Jammu & Kashmir, India

18. **Dr. Joben K Antony**, Assistant Professor of Economics, St. Thomas College Pala, Kerala
19. **Dr. Jublee Goswami**, Assistant Professor, Department of Economics, L.C.B. College, Maligaon, Guwahati, Assam
20. **Dr. Khirod Kumar Phukan**, Assistant Professor, Department of Economics, Madhabdev University, Narayanpur, Assam
21. **Ms. Kuntala Dutta**, M.A. in Cultural Studies, Department of Cultural Studies, Tezpur University, Tezpur, Assam
22. **Ms. Lalnunthari**, Associate Professor, Government Aizawl West College, Aizawl, Mizoram
23. **Dr. Mahendra Hazarika**, Associate Professor, Department of Economics, Madhabdev University, Narayanpur, Assam
24. **Dr. Mandakini Baruah**, Assistant Professor, Department of Cultural Studies, Tezpur University, Tezpur, Assam
25. **Dr. Minati Mallick**, Assistant Professor of Economics, North Orissa University, Baripada, Mayurbhanj, Odisha
26. **Dr. Pranab Bujarbarua**, Assistant Professor, Department of Botany, Handique Girls' College, Guwahati, Assam
27. **Mr. Prabal Sen**, Caritas India, Northeast Zone, Joypur, Kharghuli, Guwahati, Assam
28. **Mr. Pranab Jyoti Neog**, President, Xavier's Foundation, Rajgarh, Guwahati, Assam
29. **Mr. Ranjan Kumar Panda**, Reader in Economics, T.T. Mahavidyalaya, Ghatagaon, Keonjhar, Odisha
30. **Dr. Shrinibas Jena**, Lecturer in Economics, Gopaljew Mahavidyalaya, Benamunda, Keonjha, Odisha, India
31. **Dr. Tarun Kumar Ojha**, Reader in Economics, Baripada College, Baripada, Mayurbhanj, Odisha
32. **Ms. Urmi Pattanayak**, Doctoral Scholar in Economics, North Orissa University, Baripada, Mayurbhanj, Odisha
33. **Mr. V. Zothankhuma**, Assistant Professor, Government Aizawl West College, Aizawl, Mizoram

22

The Problem of Unemployment and Underemployment in Rural Assam: A Study

Gobin Chandra Boruah

Introduction

The growing problem of unemployment is indeed a big challenge for the country. It is just the contrary of the term employment. ILO defines employment as "Persons in employment comprise all persons above a specified age who during a specified brief period, either one week or one day, were in the following categories- paid employment or self employment." On the other hand, in the words of Sen, "Unemployment is a state of being without fruitful work and the participation in fruitfulness of work is, to a large extent, a result of social conditioning. In studying economic behaviour and the problems of economic policy, the concept of unemployment has to be viewed not only in the light of production and income but also in terms of perception of people caught by the statisticians' slide rule" Sen (1975, p.40). Mukharjee (1994) states that large spell of unemployment ruins a person's dignity and self respects, creates tension with the family and also within the community, renders them apathetic to ordinary social action and duties. When a person suffers from, intermittent periods of unemployment he may incur wasteful expenditure owing to irregularity of habits and recklessness to enjoy luxuries. It is a social problem and it creates inequalities of income, economic imbalance and frustration in the minds of educated youths exposing them to the danger of being attracted to unwanted and antinational elements (Rajavel, 2005). The problem becomes more serious in India, due to inadequate growth of employment in the secondary and tertiary sectors. As part report on fifth annual Employment - Unemployment Survey (2015-16), Govt. of

India, the unemployment rate was estimated to be 5.0 per cent at the All India level under the UPS approach or in other words 5.0 per cent of the persons aged 15 years and above who were available for work could not get work during the reference period. In rural sector, the unemployment rate was estimated as 5.1 per cent whereas in urban sector, the unemployment rate was 4.9 per cent under the UPS approach. In both the rural and urban areas, unemployment rate among the educated was higher than that among those whose education level was lower than secondary. The unemployment rate was significantly higher among females as compared to males. At the All India level, the female unemployment rate was estimated to be 8.7 per cent, whereas for males it was 4.0 per cent (under the UPS approach). Similarly unemployment rate was much higher among the youth (15-29 age group) than the overall unemployment rate. Unemployment rates also vary sharply across states. States where wages are higher than in neighbouring ones because of strong bargains or social security provisions, such as high minimum wages, had high incidence of unemployment in general (NSSO, 2006).

There is a high inter-state variation in the growth of income and employment. In some states growth of income is high and so is employment, but in some states such as Assam growth of income is low and low income growth has been accompanied with still a lower growth of employment. In Assam the non-agricultural sectors have not expanded much and this has restricted the expansion of employment.

Unemployment and underemployment are considered to be the root cause of many problems in the rural area. It not only erode the normal life but also generate an atmosphere of inaction and frustration among the people. Because of the lack of adequate employment opportunities poverty has become more intense and appears to be an incurable ulcer in rural Assam. After independence the government took policy measures to reduce the incidence of unemployment. In spite of different employment generation programmes launched by the central and state governments, no significant improvement has taken place so far.

Objective and Methodology of the study

The main objective of the study is to find out the extent of employment, unemployment and under employment in rural Assam. The paper also tries to estimate the different working activities engaged by the workforce, available in the rural area. Moreover, an attempt has been made to introduce the main factors behind the problem of unemployment.

The study is largely an empirical one. The universe of the study consists of all the rural households of Assam. One representative district, one with most of the characteristics of the state is selected. Since Assam economy is primarily agrarian and industrially backward, district Lakhimpur appears to be a good representative and it is selected. The district is composed of two subdivisions:

North Lakhimpur and Dhakuakhana. Keeping the general characteristics of the state in mind 12 villages, five from Dhakuakhana subdivision and seven from North Lakhimpur subdivision are selected in such a way that all major communities of Assam are represented. From these villages 220 households from different communities are selected. The method used is stratified random sampling. The total numbers of people sampled are 1180. All categories and religions of people staying in the state are covered in the sample. The study is not based only on the primary data, whenever necessary the study also utilizes the secondary information. The primary survey has been carried out using a structured questionnaire.

Employment Scenario in Assam

As per the report of Employment and Unemployment survey 2009-10. Government of India, the rate of unemployment by broad usual activity was 4.1 per cent in rural Assam against 2.1 per cent in rural India. Similarly, the rate of unemployment in urban Assam was 5.8 per cent against 3.7 per cent at all-India level. There is a significant difference between unemployment status of males and females. In 2009-10, 3.6 per cent male and 6.8 per cent female workers in Assam were found unemployed against 1.9 per cent male and 2.4 per cent female workers in the country. Similarly, in urban areas, there were 4.4 per cent male and 14.3 per cent female workers unemployed in Assam against 3.0 per cent male and 7.0 per cent female workers in urban India (Government of India, 2011). The rate of unemployment in the state is not decreasing, rather it is increasing day by day. As per 66th round of NSSO report, the unemployment rate was 4.3 per cent in rural and 7.6 per cent in urban Assam, in the age group (15-59) according to the usual principal status.

Unemployment is a serious issue being researched all over the world. In some states of India the problem of unemployment has received a substantial research attention, but in Assam it has not been studied much. Owing to the overdependence on agriculture, the unemployed people are difficult to identify. Moreover, some people are engaged not in a single job but in a number of activities. Apart from agriculture, some rural people are engaged in carpentry, fishing, poultry farming, dairy farming, and various less capital intensive activities. However, most of the rural households have at least a parcel of land and they tend to diversify their working opportunities in different ways. There are different income generating activities apart from agriculture in the rural areas: the rice milling, transport business such as motor driving, carrying of goods and people by bullock cart, boat, rickshaw and push cart, etc.

Unemployment in the Surveyed Villages

Employment is divided in three categories: self-employed, regular wage or

salaried employed and casual worker or daily wage earner. The NSSO defines the regular employees as "those, who worked in others' farm or non-farm enterprises (both household and non-household) and in return received salary or wage on regular basis" (NSS 62nd Report, p. 14). The casual wage labourers are those who are engaged in casual work either in farm or non-farm sectors (both household and non-household) and get in return wages according to the terms of daily or periodic work contract. On the other hand, the self-employed or the own account workers are those who have got some degree of autonomy and economic independence in carrying out the work (Government of India, 2009-10, p. 17).

Table 22.1 Unemployment in the Surveyed Area under Usual Principal Status (UPS) activity (in percentage)

Surveyed Villages	Workforce			Rate of Unemployment	All
	Self-Employed	Regular salaried/wage earners	Casual workers		
1	2	3	4	5	6
Batchoramukh	25.7	8.6	65.7	-	100
Bamchapor	21.7	8.7	63.8	5.8	100
Kathabari	28.1	12.5	59.4	-	100
Duliyagaon	37.9	13.8	42.5	5.8	100
Chorimorya	24.2	0.0	75.8	-	100
Kharkati	41.5	12.2	46.3	-	100
Tiokiya	29.3	14.6	56.1	-	100
Dhemagrah	55.8	11.6	32.6	-	100
Soriyah bari	8.4	0.0	91.6	-	100
Brisnupur	17.2	10.3	72.4	-	100
Bhoroluwa	34.6	7.7	57.7	-	100
Joriguri	32.0	12.0	56.0	-	100
Total	30.8	9.6	58.4	1.2	100

Source: Primary Survey, 2010-11

There are various activities engaging the people in the study areas; some are employed as regular salaried workers in both government and private sectors. Some are self-employed and others work as casual or daily wage earners. Of course, there are people who are voluntarily unemployed. They are waiting for better jobs. By using the definition of various measurements (the UPS, CDS and CWS) of NSSO in the study area, it is found that under the usual principal status, 32.6 per cent of the total population belongs to the labour force and 99 per cent

of them are employed. In other words, only one per cent job seekers are unemployed. There are two villages, Bamchapori and Duliyaogaon where unemployment is found on UPS criterion. The rate of unemployment in both villages is 5.8 per cent.

The categories of employment vary over the villages. In villages Soriyahbari and Chorimoriya, there is no salaried person. The number of those who are self-employed are also very low in Soriyahbari village. The highest per cent of self-employed were observed in village Dhemagrah (55.8 per cent) followed by Kathabari (41.5 per cent). Similarly, the percentage of regular salaried workers is highest in Tiokiya (14.6 per cent) followed by Duliyaogaon (13.8 per cent) and it is low in Bhoroluwa (7.7 per cent), besides Chorimoriya and Soriyahbari. In case of casual labour, Soriyahbari can be singled out as the village with as high as 92 per cent of workers being engaged in this type of employment. It is observed on usual principle status (UPS) basis that in the surveyed villages a high percentage (58.4 per cent) work as casual labourers. While the self-employed are 30.8 per cent and regular salaried are 9.6 per cent of all workers. The remaining one per cent are unemployed.

Table 22.2 Unemployment in the Surveyed Area

Working group	UPS		CWS		CDS	
	No.	Percentage	No.	Percentage	No.	Percentage
Self-Employed	119	30.8	118	30.6	118	30.6
Regular wage	37	9.6	40	10.4	41	10.6
Casual workers	225	58.4	221	57.4	212	55.1
All	381	98.8	378	98.2	371	96.4
Unemployed	4	1.2	7	1.8	14	3.6

Source: Primary Survey, 2010-11

The unemployment rate in the surveyed villages is also measured through the current weekly status (CWS) and current daily status (CDS), as shown in table 22.2. As per the CWS, the percentage of self-employed are 30.6 per cent out of total working population while the regular wage employed are 10.4 per cent. The remaining workers (57.4 per cent) belong to the casual labour category. The percentage of unemployment as per the CWS category is 1.8.

On CDS basis the percentages of self-employed, casual workers and permanent services holders constitute 30.6, 55.1 and 10.6 per cent respectively of the total working population. Together the employed are 96.4 per cent of all workers and the rest 3.6 per cent are unemployed.

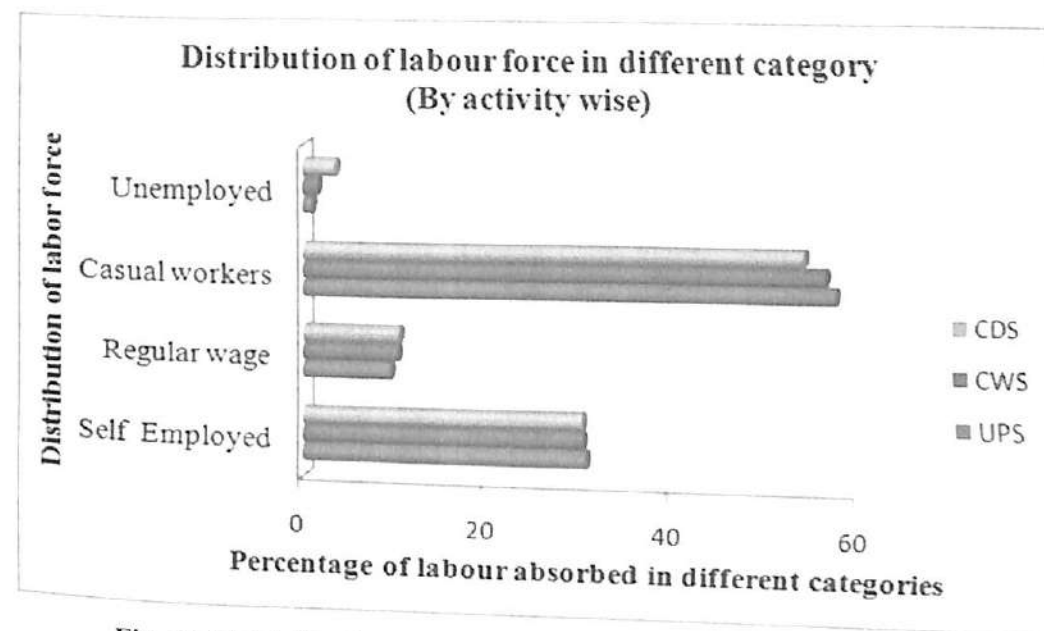


Fig. 22.1 Distribution of Labour Force among Different Activities

Table 22.3 Status of LFPR, WPR, PU and UR in Various Activities (in percentage)

Activities	UPS	CWS	CDS
LFPR	32.6	32.6	32.6
WPR	32.3	32.1	31.4
UR	1.0	1.6	3.6

Source: Calculating from Primary data collected in 2010-11.

Note: LFPR= Labour Force Participation Rate.

WPR= Worker Population Ratio.

UR= Unemployment Rate.

Labour Force Participation Rate (LFPR), Worker-Population Ratio (WPR), Proportion of Unemployment (PU) and unemployment rate (UR) in the surveyed villages are shown in table 22.3. It is observed that the LFPR is 32.6 per cent. The worker population ratios are 32.3 per cent, 32.1 and 31.4 per cent in UPS, CWS and CDS bases respectively. The rate of unemployment varies from 1 per cent to 3.6 per cent depending on the criterion adopted.

Seasonal Unemployment

Agriculture is looked upon not merely as the source of livelihood for the population, but also the potential source of employment for the increasing rural

labour force. This is due to the slow growth of work opportunities in the non-agricultural and other subsidiary sectors (Khanka, 1988). An important characteristic of rural job market is that the demand for agricultural labourers increases in peak period of cultivation and decreases in post cultivation period, which implies the employment generations in the rural economy depend upon the change of seasons. This category of unemployment is seen not only in agriculture; but also in non-agricultural activities as well. For example, some small scale industries like the brick making, pot making, etc. cannot operate in the rainy season and during this time the workers of all those seasonal industries become jobless.

Estimation of Underemployment

The status of full employment, underemployment and unemployment in the surveyed villages, is shown in appendix I. The data reveal that 29.5 per cent workers are fully employed and as high as 69.5 per cent are underemployed and only one per cent unemployed. The status of employment varies from village to village. In Chorimoriya as high as 60 per cent of all workers are fully employed. On the other extreme is Batchoramukh with only 5 per cent workers being fully employed. Similarly, the rate of underemployment has a substantial inter-village variation. The highest rate is in Batchoramukh (95 per cent) and lowest in Chorimoriya (40 per cent). On average the rate of underemployment is very high in the surveyed villages compared with the full employment and unemployment

Table 22.4 Status of Employment, Underemployment and Unemployment Based on CDS (7 hour norms)

Surveyed Villages	Fully employed	Underemployed	Unemployed
Batchoramukh	65.00	35.00	-
Bamchapori	11.76	82.35	5.88
Kathabari	26.32	73.68	-
Duliyagaon	52.94	41.18	5.88
Chorimoriya	40.00	60.00	-
Kharkati	25.00	75.00	-
Tiokiya	47.62	47.62	4.76
Dhemagrah	57.14	42.86	-
Soriyah bari	60.00	20.00	20.00
Brisnupur	50.00	43.75	6.25
Bhoroluwa	33.33	66.67	-
Joriguri	57.14	42.86	-
Average	44.09	52.27	3.64

Source: Calculated from Primary Survey, 2010-11.

rates. It is also found that agricultural activities are not the only employment provider; non-agricultural activities are also important. The non-agricultural activities encompass mainly carpentry, weaving and other cottage industries, and specially harvesting of various products from Common Property Resources which are scattered in and around the surveyed villages. However, the rates of full employment and underemployment basically depend on the pattern of farming. Where multi-cropping is practised, the level of employment is high.

By taking 48 hours in a week and 8 hours per day norms under CWS and CDS criteria, the full employment is calculated as 44 and 31 per cent respectively. The average percentages of underemployment under CWS and CDS criteria are 54 and 66.

In what follows the magnitude of unemployment is estimated using a revised standard of full employment in the surveyed villages. In the rural areas, the duration and intensity of work vary considerably. If the working hours of all those who consider themselves to be fully employed are taken to estimate the norm then an average of seven hours emerges. This is taken to be the norm of full employment, and based on it the employment status is calculated. The estimation shown in table 22.4 uses CDS. There is a significant difference between the rate of unemployment calculated as per the NSSO norm and seven hours' full employment norm.

As per this criterion, the percentage of fully employed is highest in village Batchoramukh (65 per cent) and lowest in Bamchapori (12 per cent). In rural area, there are workers who have no day of leisure but the intensity of their work is relatively low. Many self-employed belong to leisureless category.

Factors Determining the Level of Unemployment

The causes of unemployment can be traced to the economic, social and the personal factors which are most often interrelated. Economists have explained unemployment largely in terms of various economic factors such as lack of investment, lack of demand, dislocation of industries, new machinery, etc. Moreover, there are numbers of social and personal factors which appear as the main difficulties of employment generation in the rural economy. The social factors are the geographical immobility, rapid growth of population, defective education system, etc. while the personal factors are the willingness to work, working skill, productivity, the required leisure time, etc.

The low levels of savings and investment in the state appear as the prime causes of rural unemployment. The rural people earn their income from different farm and non-farm activities. The farm activities include agriculture (crop production), animal husbandry producing milk, meat, egg, etc., forestry and logging, plantation, fishing, etc. where the non-farm sector includes various

traditional industries, transport services, agro processing industries, etc. Typically, agriculture accounts for almost 50 per cent of the total income of rural households, while the remainder is derived from the rural non-farm activities. However, the rural people spend the larger part of their income on food and other needs of the day-to-day life, therefore savings of many rural households are low.

It is observed that the youths belonging to rich families with high education and social status have better job opportunities than those belonging to the poor families. The educated and rich parents can possibly take the right choice for their children's future in case of offering education. But it is not that every child of educated people gets the employment opportunities.

There are various factors determining the level of unemployment: level of education (S_c), physical capital (K_p), intensity of cultivation (I_c), etc. In order to have a more explicit idea about the relationship we estimate a regression as shown in equation (1).

$$U_N = 1.425* + 0.10S_c - 0.010*I_c - 0.0009*K_p \dots\dots\dots(1)$$

(8.77) (1.27) (8.05) (2.71)

$$R^2 = 0.30 \qquad \bar{R}^2 = 0.29 \qquad N = 220$$

Note: * Significant at one per cent level

Equation (1) states that the intensity of cultivation and physical capital have a negative relationship with the rate of unemployment. As the intensity of cultivation increase by one percentage point the rate of unemployment decreases by 0.01 percentage point. Similarly if one additional rupee is invested on physical capital the rate of unemployment decreases by 0.0009 percentage points. The impact of physical capital is very low in reducing unemployment because part of the physical capital has labour replacing effects. However, the relationship between the level of education and unemployment is positive but insignificant, implying that growth of education in rural area may increase the unemployment problem. However, the explanatory power of the equation is not high; it is only 30 per cent.

Conclusion

Unemployment and under employment are big problem in the country, and more so in Assam. Owing to the slow pace of rural development the problem has become serious day by day. The development of rural economy which can reduce unemployment requires expansion of infrastructure, the improvement of agricultural technology through new inputs, establishment of rural industries, expansion of education, etc. Education has expanded in the rural areas, but this expansion has not been accompanied with the opening of new avenues of

employment for the educated rural youth. The type of education imparted in schools and non-technical colleges is not much demanded in many branches of employment, rather technical skill and vocational training are more in demand.

Since agriculture is the dominant occupation in the study area, therefore those with no land of their own or a very small size of landholding, tend to cultivate some land on share cropping or cash-rent basis. Most of the share-coppers and tenant-farmers do not depend only on cultivation; they also work as casual labourers. Since the size of landholding in many households is small, which results in the agricultural income being low, households have no way to avoid the non-agricultural work. In some cases, the farmers earn more from non-agricultural than agricultural activities. The common activities allied to agriculture in the study area are poultry, piggery, fishery, dairy, animal husbandry, etc. While the non-agricultural activities are carpentry, road construction and other public works, shop keeping, vending on the streets, etc. The people of some parts of the surveyed area are engaged in sericulture. Handloom, handicraft, furniture-making (wood/cane/bamboo), pot-making, brick-making, well-ring making, etc. are most remarkable industrial activities in the surveyed area. Most of the farmers who practise mono-cropping are engaged in non-agricultural work which is available in their locality during the lean agricultural period. Those living in the neighbouring villages of urban centres, migrate to urban areas for casual work paying a high wage rate. What is striking in the surveyed area is the relative importance of non-agricultural activities; it is these activities which yield higher income than agriculture.

Mechanisation of agriculture is one of the promising methods for raising the intensity of cultivation. It boosts the agricultural productivities and creates additional employment opportunities. Owing to the rainfed nature of cultivation, sometimes chemical fertilizer does not give the expected returns. The lack of irrigation facilities is the main cause of low intensity of cultivation. Therefore, the adequate irrigation facility is an important input for creating more employment and raising agricultural productivity in the surveyed area. Apart from this employment depends on the use of physical capital and intensity of cultivation. The expansion of physical capital and a rise in intensity of cultivation tend to raise the level of employment. On the other hand, per capita income in a farming household depends positively on employment, capital used in cultivation, and the gross land cultivated.

Appendix
Table A.22 (I) Status of Full Employment, Under Employment and Unemployment in Surveyed Villages

Surveyed Villages	UPS		CWS		CDS	
	Fully employed	Under-employed	Unemployed	Fully employed	Under-employed	Unemployed
Batchoramukh	5.00	95.00	0.00	45.00	60.00	0.00
Bamchaponi	47.06	47.06	5.88	41.18	88.24	5.88
Kathabari	15.79	84.21	0.00	36.84	84.21	0.00
Duliyagaon	29.41	64.71	5.88	29.41	47.06	5.88
Chorimoriya	60.00	40.00	0.00	30.00	70.00	0.00
Kharkati	25.00	75.00	0.00	30.00	80.00	0.00
Tiokiya	9.52	90.48	0.00	52.38	71.43	4.76
Dhemagrah	47.42	52.38	0.00	61.91	80.95	0.00
Soriyahbari	10.00	90.00	0.00	55.00	25.00	20.00
Brisnupur	31.25	68.75	0.00	37.50	62.50	6.25
Bhoroluwa	46.67	53.33	0.00	53.33	78.57	0.00
Joriguri	35.71	64.29	0.00	57.14	64.29	0.00
Total	29.45	69.55	1.20	44.08	65.75	3.65

Source: Estimated on the data from the Primary Survey, 2010-11.

Note: In case of UPS activity 300 days (2400 hours) is taking as base, in case of CWS activity 48 hours is taking as base and in CDS activity 8 hours in a day is taking as base for calculation the full employment. Those are working less days or hours in a particular period assumed as under employment. Similarly people who are unable to work at least one hour in the referred period considered as unemployment.

Table A.22(II)
Household Working Members, Income and Hours Worked

Villages	Average no. of workers per household	Per capita household income (Rs in, 10 ³) per annum	Average daily working hours
Batchoramukh	2	89	5
Bamchaponi	2	92	5
Kathabari	2	95	6
Duliyagaon	3	96	5
Chrimoriya	2	94	6
Kharkati	2	110	5
Tiokiya	1	112	6
Dhemagrah	1	132	7
Soriyahbari	1	54	6
Brisnupur	1	88	6
Bharaluwa	1	105	7
Joriguri	2	115	7
Overall	2	99	6

Source: Primary Survey, 2010-11.

Table A.22(III)
Investment on Physical Capital in the Surveyed Households (Rs in 10³)

Villages	Investment on physical capital	
	Per hectare	Per household
Batchoramukh	1.43	2.79
Bamchaponi	0.96	1.37
Kathabari	1.13	2.13
Duliyagaon	0.98	1.80
Chrimoriya	1.10	2.40
Kharkati	1.32	3.12
Tiokiya	1.05	2.19
Dhemagrah	1.34	3.23
Soriyahbari	2.53	4.18
Brisnupur	1.56	4.11
Bharaluwa	1.38	3.11
Joriguri	0.97	2.57
Overall	1.31	2.63

Source: Primary Survey, 2010-11.

Table A. 22 (IV)
Distribution of Household Income (Yearly Income per Head in Rs)

Quintile	Average monthly income per head	Unemployment rate (in CDS)	Population	Average household size	Average no. of workers	Average years of schooling	Physical capital used per household (in Rs)
Poorest (288-833)	667	3.11	301	7	2.85	5	1283
Lower-Medium (834-1333)	1045	3.50	278	6	2.05	6	2540
Middle (1334-1756)	1547	4.30	225	5	1.80	7	2248
Upper Middle (1757-2507)	2116	3.50	220	5	1.66	6	2398
Richest (2507-7018)	3376	3.59	156	4	1.57	8	28434
All	1750	3.60	1180	5	1.98	7	7381

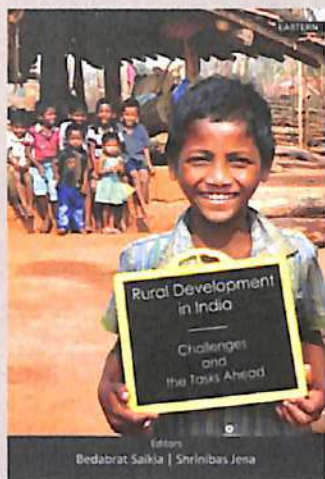
Source: Primary Survey, 2010-11.

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The Book

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The Editors



Dr. Bedabrat Saikia is an Assistant Professor of Economics in Handique Girls' College, Guwahati, Assam. He has authored two books - *Agricultural Development in Arunachal Pradesh* and *The Small Scale Tea Cultivation in Assam*. He also edited three books - '*Gender Issues and Status of Women in India*', '*Empowerment of Women in India: Challenges and The Task Ahead*' and '*Civil Societies and Socio-Cultural Harmony in Assam*'. He has published more than forty four research articles in reputed international and national journals and edited books and conference proceedings.



Dr. Shrinibas Jena is presently working as Lecturer in the Department of Economics, Gopaljew Mahavidyalaya, Benamunda, Keonjhar Odisha. He got his Ph.D. degree from Dibrugarh University, Dibrugarh, Assam in 2006. He has written a number of theme papers for various national and regional seminars and conferences at many reputed institutions. Dr. Jena has been a contributor to various economic Journals of India and Abroad.

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