CHAPTER-I

INTRODUCTION

1.1 Introduction

Agriculture is the main sector that generates income and employment in rural areas of developing countries. It has held centre stage in the economic development discourse. For long, rural development was understood synonymous with agricultural modernization within the larger process of market led structural transformation of the economy. The idea was articulated through two sector economic growth models (Lewis 1954; Ranis Fei, 1964) wherein the surplus rural labour force was absorbed in the expanding industrial sector of the economy. Within this framework, rural nonfarm economic sector was also understood as repository of economic activities, which withers away with greater mobility of resources and factors of production between rural and urban areas. With greater competition and specialization, the inferior commodities in the sector are outcompeted from the market by the superior commodities from the industries.

However, subsequent empirical realities challenged this two-sector notion of rural transition particularly on two fronts. Firstly, the industrial sector failed to absorb the surplus rural labour force creating widespread problems of urban unemployment, congestion, bulging informal sector, pressure on public utilities etc. Secondly, the rural non-farm sector (RNFS) continued to expand and provide employment to surplus workforce in agricultural sector. It showed both continuity and adaptability in different economic settings. As a result, the RNFS began to receive renewed focus in both policy and research level.

The inability of industrial sector to absorb surplus rural labour force accompanied by constraints in agriculture to generate employment to increasing population necessitated the understanding of farm -nonfarm interlinkages. Given the heterogeneity within the norm farm sector, it growth performance and labour absorption capacity depends, among many other factors, significantly on the agricultural sector. Many theoretical and empirical works has been done on the different dimensions of the farm nonfarm interlinkages in different regional, ecological and social contexts. However, only a few studies have been done on the subject in northeastern states of India, which not only forms a specific regional context in itself but also has multiple contexts in it with
enormous diversity –social, cultural, ecological, ethnical and geographical. In this context, the study tries to understand the nature, extent and causes of rural work force diversification from agriculture to nonfarm economic activities in Arunachal Pradesh.

1.2 Statement of the Problem

Arunachal Pradesh is a large state located at north-eastern part of India. It has a population of around 13, 83, 727 persons with low density of 17 person per Sq. km as per 2011 census. It shares international border with China in the north, Bhutan in the west and Burma in the east. It is predominantly a tribal state with more than 100 tribes and sub tribes living across 21 districts. It was only after independence in 1947 that the region received policy attention for modernization. Prior to it, these tribes lived in relatively isolated socio economic formations with subsistence level of agriculture under the framework of their respective customary rules.

Under the development intervention of state assisted by grant in aid from Central government, the economy has attained remarkable transformation over last four decades. The structural transformation of the economy is characterized by increasing share of tertiary sector in NSDP with substantial presence of Government sector in last four decades while share of secondary sector has increased only marginally. Though the share of agricultural sector in NSDP has declined, it still continues to be the main base of the economy. The rural work force composition clearly shows that agriculture still retains the largest share of rural workforce. The continuing centrality of agriculture, however, has been accompanied by expanding share of RNFE over the years. Diversification of rural work force from agriculture to RNFE is an important dimension of agricultural transformation. It is very important to study the emerging linkages of this process particularly in the context of emerging challenges of employment generation in the state which has a very poor industrial base accompanied by complex problems specific to a mountainous economy.

While there has been a steady expansion of the rural non-farm sector in Arunachal Pradesh, the drivers of such RNFE expansion remains to be investigated thoroughly. The drivers of RNFS, identified in the literature include agricultural development and its spill-over effects, urban linkages, public investment (particularly public works aiming at employment generation), corridor effects along transport and communication networks,
backward linkages of mining and industrialisation. Which of these factors have been operative in Arunachal Pradesh deserve critical scrutiny. Further, the implications of non-farm sector growth in a mountain economy need not be the same as elsewhere.

The study of farm nonfarm linkages can be undertaken at different levels of aggregation and from different analytical perspective. Studies base on macro level variables and generalisations, however, do not adequately capture the micro level interlinkages particularly in transitional and partially commercialized agrarian economies like Arunachal Pradesh where input and product markets are absent or underdeveloped with substantial non market economic relations.

Therefore, the study takes household as the unit of analysis to study the emerging linkages between farm and non-farm sector in rural areas at the micro level.

1.3 Objectives of the Study

In tune to the vision of research undertaken, the following objectives have been formulated. The broad objectives of the study are:

i. To understand the process of agrarian transformation in Arunachal Pradesh.
ii. To estimate the extent, composition and growth of RNFE in Arunachal Pradesh across various spatial scales.
iii. The study tries to capture the nature of interface between farm and nonfarm activities among the households.
iv. To examine the relative role of agricultural and non-agricultural determinants of household’s entry into RNFE.
v. The study also tries to find out the policy prescriptions for development of RNFS.

1.4 Database, Methodology and Sampling Procedure

The study has attempted to find out the emerging livelihood strategies among the rural farm households by locating the pattern of household diversification to rural nonfarm economic activities in Arunachal Pradesh on the basis of field data collected from six villages in West Kameng and Tawang districts of Arunachal Pradesh.
The choice of survey area was done by using multistage sampling method by following steps.

Firstly, we have identified district as the first unit of choice. We selected West Kameng and Tawang districts for collection of sample population. Extent of district level diversification was the criteria used for selection of the districts. Both the districts are located on the western most part of Arunachal Pradesh sharing international borders with China and Bhutan at the North.

It was found that these two districts along with Papumpare district have registered highest percentage share of RNFE among all the districts in the State during last two decadal population censuses of 2001 and 2011. Between 2001 and 2011, the share of main workers in RNFE has increased and share of main workers in Agriculture has declined in Tawang District. On the other hand, the share of main workers in agriculture has increased while RNFE has declined in West Kameng district. However, both districts continue to have very high share of workforce engaged in RNFE. Both the districts have similar geographical, cultural, economic and historical landscape, which provides the social background for better comparability and insights to capture the household level patterns of change. So, the study has focused on two districts, where RNFE share is already high in order to capture diversity within the single district.

Secondly, in the second step two blocks were chosen. Dirang block of West Kameng district and Lumla block of Tawang district was chosen on the basis of two criteria—firstly, both the blocks had moderate level of diversification to RNFE on the basis of secondary data. Secondly, they were almost at similar distance from their respective district headquarters.

Thirdly, three villages from each block viz, Nyukmadung, Warjung and Lish village from Dirang block while Thrilam, Hoongla and Namtsering from Lumla block was chosen following the criteria’s viz, distance from the nearest urban centres i.e village located at far off place from the nearest urban centre while the two districts are located within the range of twelve km from the nearest urban centre. It was done to capture the spatial impact of urban centers in generating nonfarm activities in the rural areas and variations in household entry in RNFE among the villages at different locations. Moreover, the criteria of diversity in location of agricultural plots were to capture ecologically influenced variations in crops cultivated. So, one village with agricultural
plots located in the valley, another located on the slopes and one located at higher slopes of the mountain was selected.

The study has used data from both primary and secondary sources. In order to find out the nature of agrarian transition, the secondary works on the area is used to understand the processes involved. It has been further, elaborated using the agricultural census data. We have used both population census abstract 2001 and 2011 to provide description of the transformation in rural workforce particularly in terms of variations in RNFE both at the district and block level. From population census data, RNFE is derived by subtracting agricultural workers and agricultural labours from total rural workforce. In absence of block level agricultural data, the block level analysis of RNFE has been confined to non-agricultural data only. The general information about the village with respect to agriculture and RNFE was collected from detailed discussion with farmers, traders in local agricultural markets and shopkeepers. Complete enumeration of households in smaller village and at least seventy per cent of households from large villages were surveyed. We have used pooled panel regression model to explain the inter district variation with the cross sectional data on important variables generated from different sources in 2001 and 2011 in order to get insight into district level determinants of RNFE. The block level analysis is done from data generated from 2011 population census data by using ordinary least square regression technique. We have used binary logit regression model to find out household level determinants of rural non-farm employment along with cross sectional tables to find out the gross effects of key variables. The Quantitative analysis had been preceded by participant observation, personal discussions and interviews with different persons of the villages in order to assess the validity of operational variables.

1.5 Organisations of Chapters

The study is organized in seven chapters. The first chapter provides an overview of the study i.e., objectives, methodology, research questions, scope, database, sampling design and methodology. The second chapter provides a general review of literature on the concepts, theories, and empirical findings with respect to RNFE from different analytical perspective. Chapter three provides an overview of the economic transformation in the state with the help of secondary data.
Chapter four and five provides a glimpse of agricultural transformation and rural non-farm economy in Arunachal Pradesh with the help of existing research findings and the secondary data analysis. Chapter six provides an analysis of farm-nonfarm interface with the help of primary data collected from West Kameng and Tawang districts. Finally, the concluding remarks and policy implications of the research have been placed in the last chapter.