

CHAPTER-VI

Summary, Conclusion and Policy Recommendations

The food security situation in India shows a positive implication for the entire population when there is an adequate supply of food for all. The national level picture is not at par with the individual or household level. The achievements of household, in the states are also not equal. The smaller states in North-Eastern Region are performing well than economically better-off states in India in reducing child malnutrition. With sufficient foodgrains in buffer stock during the last decades of production considered the availability of food and access to it as the major determinating factor of food security upto the point of time when nutrition was devoid of the food security. When all these there aspects are assured only then one household is termed as food secured. The overall objective of this study is to assess the food security situation of the study area and identifying food secured and insecured households with respect to the three components of food security. The area choosen for the study purpose is the Cachar District of Southern Part of the State Assam. This chapter summarises the major findings of the study, policy recommendations are drawn into notice and suggestions are made for the future research works to be taken care of so that the society is better approached.

6.1 Summary and Conclusions : Feeding the millions in the world is a million dollar question when the word food prices are continuously soaring high. Neglecting the agricultural cultivation, reduction of area under cultivation and allowing more land for the production of bio-fuel in some countries worsened the crisis already in existence. Worst affected groups are poor people with all their vulnerability. The head of the nations of different countries are engaged in prioritising the food as a basic human right. Purchasing power is the constraint in procuring food. Political instability and threat of mass revolt have cropped up in different parts of the world when food is considered as an essential biological need. The recent climatic event has also reduced the agricultural food production.

Poverty elimination was considered as an important task since the beginning of the post world war –II period and through the initial era of development. When a

concerted effort was undertaken. In this context South Asia has made a steady and significant progress in terms of economic growth and food security.

Still, the region is inhabited by the world's largest share of poor with a substantial number trapped in poverty and hunger where population growth is exerting pressure to the economy of the region. The available data base reveals the fact that performance of South Asia when compared to some other regions in the developing world seems to be quite satisfactory if not better. And still achievement of results like East Asia and the Pacific yet to happen in the region. Ensuring food security for all is a challenge different dimension. And how many of the countries in South-Asia like, Nepal, Bangladesh, Bhutan, Sri-lanka, Pakistan etc being underdeveloped are approaching the problems of food security and malnutrition are tried to assess. The surrounding environment of under nutrition and malnutrition in other nations gave comparative picture in the attainment of targeted standards of food security in North-Eastern region of India, whatever study is made on food security along with nutrition security shows that the overall scenario is not very sound. Though the percentage under nutrition and malnutrition are less than the selected economically better off state the children of North-Eastern states are suffering still from these nutrition insecurities.

Assam is comparatively bigger state in North –Eastern region and its economy is more or less a representative of other states in the region. According to NSSO 58TH Round, the food availability status in Assam is the lowest among all the states in India. The number of households not having enough food in month is also highest in Assam. The district level situation in this respect requires attention in the states. For this, the study is carried out in this area of Assam in Cachar district. When food security topped in the priority list of MDG, the India's performance attracts attention in this regard. The problem of food security centres around the resources and means of having accessibility to stock of food grains and proper utilization of food in the human body of an individual. The types of malnutrition observed in the children below 5 years of age group is having resemblance with that of the famine – prone country. In the line of suggestion made by Prof. A. Sen, India's primary objective should be the elimination of

latent hunger, malnutrition and under-nourishment. The government's assessment of nutrition status rests on nutritional outcome of the households.

The three aspects or components of food security – availability of food, accessibility of food and utilization of food corroborates the World Bank's (1986) definition of food security "access by all people at all times to enough food for an active and healthy life". In all definition of food security, the explanation is an economic accessibility, physical availability of food to the people and fulfillment of nutritional requirements of the people.

The study intends to throw light on the situation of food security in North-East India in general and Assam in particular. The critical political scenario, identify crisis, migration and all remained proximal during the last few decades except the food security. Migration in the state has affected the economy in a different way. The absence of any specific study on food security in the Cachar District of Assam has made it necessary to carry out such an work of academic and economic importance.

The economy of the district is affected mostly by natural calamities. The youths of the district are facing unemployment problem. Purchasing power being an important indicator in measuring food security, the socio-economic conditions of the district need a detailed study in this eventuality. Not only the purchasing power, other indicators are also equally important to be studied and analysed.

The study is based on the analysis of food security situation of the people where households are considered as unit of measurement. All three components of food security – availability, accessibility and utilization are to be measured for the identification of food secured and food insecure households. Generally, the term food availability is used with reference to food supplies at the regional or national level and is judged at the household level on the basis of the combined indicators like, purchased food, own production, in-kind-wages, gift and transfers and food in stock. The judgement of food access is possible when households have adequate resources to obtain sufficient foods for nutritious diets. Access is measured by the indicators like total household income, savings and assets in their possession. Food utilization is the proper biological use of food, requiring a diet

providing sufficient energy and essential nutrients potable water and adequate sanitation. Nutritional status of an individual is the outcome of the food utilization.

Keeping all these in focus the objectives set for the study are to measure food access of households, to measure food utilization pattern of households, to measure food availability at household level and to identify food secured and food insecure households.

The research hypotheses constricted for validation is based on this association household income has positive impact on household food security status. The chapters of the present thesis are : Chapter – I : Introduction, Chapter – II : Review of Literature, Chapter – III : Socio Economic Overview of the Study Area, Chapter – IV : Conceptual, Theoretical, Framework and Methodology, Chapter – V : Data Analysis, Result and Discussion (Section – A and Section – B), Chapter – VI : Summary, Conclusion and Recommendation and Last is Bibliography.

The major objectives set for the study is mentioned in the introductory chapter and is tried to fulfill the analysis of the work.

The second chapter contains review of existing literature on food security at household level to find out the lacunae in the area of research. Access to safe and adequate food is one of the important and basic prerequisite in improving the nutritional states of people. Keeping this in view, the review of available literature has gone through micro level study of food security. Nutrition security is assessed with food security, where there pillars of food security is being studied in an intense way.

The socio-economic overview of the study area has analysed the North-Eastern Region's typical type of physical, cultural and socio-economic characteristics is which occupied the 7.9 percent of the country's total geographical area. Population of the NER comprises heterogeneity in the elements of different races, casts, languages and cultures. This diverse entity have diverse social institutions and playing a significant role in the determination of different economic activities

of the region. In spite of poor infrastructure availability NER has experienced an extraordinary female literacy growth.

The state of Assam shares about 2.4 percent of the country's total geographical area and provides shelter to 2.6 percent population of the country. Population trend in Assam shows an enormous growth from 1901 to 2011. Percentage of decadal growth in 1961, 1971 and again it declined in 2011. Density of population per sq. km has increased to 398 in 2011 from 42 in 1901. In the same time India has also experienced an increase. Literacy rate in Assam has continuously increased from 1991 to 2011 and female literacy rate is more in Assam than the country as a whole. Gross State Domestic Product (GSDP) have shown an increase in 2013-14 at current prices. Per Capita GSDP also shown an increase. Per Capita Income (PCI) in current price has increased in 2014-15 from 2010-11 manifolds.

The sample of the study comprises of 250 households, 125 from rural and 125 from urban area of the Cachar District. The basis of selection of the sample units are purposive random sampling technique since the study is focused on household food security status only in the district. In the total 47 villages, of 44 Gaon Panchayats in 15 C.D. Blocks and 38 (28 in Silchar and 10 Lakhimpur Municipality area) urban wards are surveyed in the district for collecting data from 250 households.

Since the study is based on primary data, household is the unit of study. The data is collected through well structured questionnaire from the selected sample units. The data is collected from the households through interview method and contains information regarding household composition, source of income, education of family members, occupation, land holding, condition of housing, expenditure on food, and non-food, savings habit, consumption of adults and index children, indirect measure of income, indirect measure of calorie deficiency etc., which can figure out a complete scenario of food security status as well as nutrition security of the people of the study area.

Different techniques and tools are used for the data analysis. Three indices – Dimension Index of Food Availability, Dimension Index for Food Access, and

Dimension Index for Food Utilisation are constructed for approaching the objectives and the hypothesis of the study.

Food security of the household is measured with the help of statistical tables, diagrams and estimation of different measures of food security component is carried out in the study. The data on yearly income shows a very disproportionate distribution in the study area. More than 55 percent households are having yearly income within the category of Rs. 25,000 – 2,25,000. 4.4 percent household are earning less than Rs. 25000 in rural area. 22 percent household are having yearly income within Rs. 2,25,000 – 4,25,000. Only 1.2 percent household are earning more than this level of yearly income. The cause of this lower income level amongst the household is that both in urban as well as in rural area the household engaged in petty business in more. Less than twenty percent household are in public sector organization and are engaged in various level of job. Professional household are very less in percentage and are present only in urban areas. The study does not intend to visualize the rural urban differential. Only for some category of data these differential is pertinent to the study.

Savings behaviour amongst the household shows that amore than sixty percent households have the formal savings in institutional financial market.

When the average height and weight i.e., anthropometry of adult as observed urban household performance is much better than the rural household. Average education level measured in number of years is also having better performance in case of urban household. The yearly income of adult is also more in urban household in both male and female category.

In case of sample index children, regarding anthropometry male index children of rural area is taller than the urban index children. And female index children are taller in urban area. The average weight of index children is more in urban male and it is marginally more in case of female index children than rural area. The number of index children both male and female in urban area who have started schooling either in Anganwadi Centre or in State Govt. Primary School, or in Private English Medium School are more than the rural area.

With all these information collected the study intends to fulfill the objective set for the for the area. The first objective of the study was to measure food access of the household. The purchasing capacity of the household determines with other indicators the accessibility of food to the household. The indicators used for the measurement of accessibility of food to the households are total average income and average total savings of the household. With the help of Dimension Index (DI) constructed for the food accessibility the households are identified as food secured, vulnerable or food insecure. More than fifty percent households are vulnerable to food inaccessibility in the study area. Less than thirty five percent household are food secured.

The second objective of the study was the measurement of food utilization pattern of households. This component of food security is measured with the DI for food utilization based on six indicators and is reflected in the nutrition status of household members. These indicators are reporting against tiredness, reporting against weakness, reporting against poor concentration, reporting against hair loss, reporting against weight loss and reporting against frequent illness. Based on different categories of DI, the food utilization pattern of household reveals that more than eighty five percent households are within high range of DI. Which indicate that they are food secured with respect to this component. The food utilization pattern amongst them shows a positive indication regarding nutrition. The availability of safe drinking water, proper sanitation and education have helped them to achieve this standard of nutritional security.

Anthropometric measurement also determines the nutritional status of members of the household. In case of adult it is BMI and in case of children it z-score. The adult members of the household of the study area contains more than seventy six percent of within the normal or ideal BMI range. They are nutritionally healthy. At the same time more than seventy two percent household members are overweight which is the root cause of many life style diseases.

Nutritional status of index children with respect to z-score classification, in WFH category, the number of well nourished index children are maximum than in HFA and WFA category respectively. At the same time wasting has affected maximum

number of index children than underweight and stunting respectively. These are the extreme condition of malnutrition amongst the index children.

The third objective of the study was to measure food availability at household level. The indicators of food availability for the study was considered as amount of food purchased by the household, household's own food production, in kind wages received by the household, gift and transfers to the household and stock of food items in the possession of household. Actually, at the household level, availability of food for consumption is one of the important and necessary factors for ensuring physical access to food.

On the basis of the dimension index constructed for food availability the food secured household are fifteen in number. Two hundred thirty five households are vulnerable to the food insecurity. Means food is available to only fifteen number of people when all the indicators are taken into consideration.

The fourth objective of the study was to identify food secured and food insecure household. A household is said to be food secured. When he has fulfilled the condition with respect to the three components. The households will be food secured when the food is physically available to him. At the same time the household must have the accessibility to acquire the adequate amount of food for healthy and active determined by his purchasing capacity. With these two conditions fulfilled, the household nutritional status should also be secured by proper utilization of food in his body biologically which is a function of safe drinking water and sanitation.

The analysis of the study in a comprehensive way gives the total picture of all household with adult and index children present in the household. Three households are food secured with only adult members. Index children is those households were malnourished when required height for age (HFA) was measured and found to inadequate in height for one child. One index children was moderately underweight suffering from chronic malnutrition and moderately malnourished also when compared for their WFA and HFA z-score vale. Wasting was present in one index child when WFH z-score was measured. Therefore, three

households are food secured with their adult members, but are food insecure with their index children.

Seven households are totally food secured with all the components of the food security. These households are not having any index children as a member of the household. Remaining two hundred forty households are food insecure. They are either food insecure in one or two components of food security or are secured in one or two components. These make the household to fall automatically in the vulnerable category of food insecurity.

Therefore, the food security status of the study area cannot be judged simply by observing the climatic condition, economic environment or unemployment scenario of this region. The purchasing capacity of the household, food stock in the possession of the household, production of grain, employment scenario, infrastructural facility, public distribution system all are to be considered. Educational opportunities also play an important role in enhancing the purchasing capacity of the household. Awareness regarding food utilization in the human body is an important aspect in achieving nutrition security which become a turn conception of food security. Asset holding capacity is a key role player in the accessibility component of food security.

In conclusion, the study made a clear evidence that access to income, education, savings, land assets, production of food grain and other socio-economic environment make a household food and nutritionally secured and also make enable to enjoy an overall well-being within the household. Any hindrance in accessing these to household make them nutritionally poor, ill-fed and disease prone. Total disadvantage affect then in an all round manner. Ultimately, a country suffers with low quality of human resources.

6.2 Policy Recommendations : The results of the study forms the basis of suggestions and /or policy recommendations. Number of issues are highlighted in the study where different policy prescription is required for ensuring sustainable food security. Strategy formulation in areas of food availability, accessibility and utilization is in need of wide range of actions on the part of the government.

Occupation wise distribution in the study area shows that a good number of households are engaged in petty business which makes them economically poor and low income-earner. Their percentage is 34.8. The daily wage –earning household is 13.6 percent. Absence of non farm activities is the major cause of poor earning amongst the household in the study area. Creation of job opportunities in non-farm sector may improve the economic status of the people inducing high income earning activities for enhancing the purchasing capacity of the household for easing food accessibility.

Only 4.4 percent households are engaged in agricultural farming . Only rural households are having farm-income. Urban agricultural activities are absent in the study area. Instead of having large acres of land several households have abandoned the agricultural land and stopped producing agricultural products in the rural areas of the district under study. They become engaged in either petty business or are working as daily labour. Some of them have started their venture as an artisan. Many of them left their home in rural area and migrated to the Silchar or nearby small town for livelihood. It seems from their choice of livelihood that either they are reluctant to do the hard labour in farm activities or they are attracted by the non-farm activities with less labour in the urban areas. The non availability of agricultural input is also a major cause of leaving the farm activities. The government can take initiative in providing physical infrastructure as well as economic infrastructure in the study area, to attract the young population in agricultural activities for solving the shortage with respect to production.

Average education measured in number of years spent shows a very dismal picture in the study area. Education plays a major role in livelihood accessibility in terms of job or other income earning engagement activities. Rural area is far behind than the urban area in this regard so far as the study area is concerned. Nutrition is affected by education and in turn overall well-being of the households gets affected. Investment in social infrastructure by the government in terms of setting up of more educational institution and healthcare facilities are the need of the hour, so that household in rural areas have easy accessibility to both education and primary healthcare facility. Investment in education is the important

consideration for poverty-eradication and its related consequences viz, insecurity in food procurement, poor nutrition which may affect the study area in a positive way as because access to food is hindered by poverty. Improved human resources supported by education, health care will have easy accessibility to specific productive resources (such as land & capital) by the poor.

Fluctuations in food production and prices require stabilization for normalizing consumption patterns on the part of the government.

Utilization of food is manifested in overall nutrition status of the household. Malnutrition is not only a feature of poor people it is also present in the non- poor household also. It is not always known to everyone what food or what type of feeding practices are mostly useful for their children or for adults. Malnourishment, faulty growth rate and deficiency of micronutrient is not easily visible to a normal non-trained person. Government intervention in this respect is necessary for this informational distortion. The government intervention should be streamlined in such a manner so that nutrition level is improved and diseases are minimized in the area of study. Awareness about nutritional status of adult and children is necessary. Child malnutrition can be handled with different awareness campaign and strict vigil by the ASHA workers of NRHM programme of Government of India.

Amenities available like safe drinking water and proper sanitation facility to the household is also very less in number. The government of India has launched in “Swachh Bharat Mission”(SBM) in 2nd October, 2014. Under this mission the programmes are safe drinking water to reach every household, solid and liquid waste disposal, sanitation to every household both rural and urban areas in the name of SBM Rural and SBM Urban. The government should monitor the programme so that it can reach to the target group of household.

The BPL households need special effort in the short run for overcoming food insecurity with food aid programme. Intensive food and cash transfer programmes structured with rural development programmes will be of immense help for the BPL category households. In the long run also these programmes helps in the stability of food security situation.

6.3 Research Implications : It is evident from the findings of the study that education is a key factor which made the households constrained in getting good job or income earning activity for higher income. Research in this area need attention.

Research in agricultural sector needs attention for keeping the rural youth engaged in farm activities instead of getting attracted towards non-farm activities which in the long run is sure to affect the production of food grains and other agricultural commodities. Per capita increase in income also gets affected with less production of farm output.

Food consumption pattern needs a direction for the people both in rural and urban areas. Because due to faulty food plan and consumption affect the nutrition status of the member of the household irrespective of level of income. This should be taken care of by the research activities in this arena.