

Comparative socio-economic analysis of problems of livelihood security with respect to food security between rural and urban areas in Imphal West District of Manipur State of India

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ABSTRACT

Livelihood is simply the means of securing the necessities of life, i.e. food, water, shelter and clothing. It is defined as a set of economic activities either in the nature of self-employment and per or wage-employment thereby generates adequate resources to meet the basic requirements of life for oneself as well as the members of the household. Many definitions of livelihood security derive from the work of Chambers and Conway (1992). Monitoring livelihood security can help to identify and understand the well-being of the population and livelihood insecurity. Therefore, the present study is undertaken to look at the various aspects of household livelihood security in Manipur State of India. The primary focus of this study is to analyze the nature and extent of people's livelihood security by using household survey data with the objective of evaluating the household livelihood security with respect to food security in rural and urban area of Imphal West district. From the study, it is concluded that the percentage of annual per consumer unit consumption of food is higher for rural sample households in Imphal West district. Rice accounts for highest quantity among the food items consumed. In rural areas, the percentage of annual per consumer unit expenditure is higher for food items, while it is reverse in urban areas. The overall calorie intake is lower than the RDA in rural sample households and higher than the RDA for urban sample households. For rural and urban sample households, the protein intake per day per CU is higher than the RDA in all group sizes.

Keywords: Food, household, livelihood, security

Livelihood is simply the means of securing the necessities of life, i.e. food, water, shelter and clothing. It is defined as a set of economic activities either in the nature of self-employment and/or wage-employment thereby generates adequate resources to meet the basic requirements of life for oneself as well as the members of the household. Many definitions of livelihood security derive from the work of Chambers and Conway (1992). Till now very little study has been carried out at the micro level on socio-economic analysis of household livelihood security problems in Manipur. Very little is known about the extent, problems and major factors affecting livelihood security in Manipur. Monitoring livelihood security can help to identify and understand the well-being of the population and livelihood insecurity. Therefore, the present study is undertaken to look at the various aspects of household livelihood security in Manipur State of India. The primary focus of this study is to analyze the nature and extent of people's livelihood security by using household survey data.

MATERIALS AND METHODS

Household livelihood security is a multi-dimensional concept. In order to give proper justice to this concept multi-dimensional data are required. The data for the present study has been collected from both primary and secondary sources.

- a. **Unit of observation :** Household is the unit of observation. For the primary data, a pre-ordained questionnaire was circulated among the sample households.
- b. **Selection of area of study :** One district, out of nine districts of Manipur State have been selected purposively. In order to capture the overall picture of nature of household livelihoods, urban and rural sector household livelihoods of each of the selected districts are separately examined. Two villages from each district have been selected. The urban households of each district have been divided in two groups, urban- core and urban- periphery and we selected the urban sample households from these two urban groups.
- c. **Sampling design :** For household selection, multi-stage sampling technique is followed. Keeping in mind the limited resource of an individual researcher, in the first stage, out of nine districts, two districts have been selected purposively on the basis of certain criteria (e.g. population density, urbanization etc.). The rural and urban sectors of each of the selected district were separately dealt.

In the second stage, separate village listing of respective selected district has been prepared on the basis of some development indicators (e.g. average household size, cultivable land- household

ratio, infrastructural facility, soil fertility *etc.*). Two villages have been selected from each of the two selected districts purposively, first village is situated within 5 km distance from district head quarter and second village is within 10 km from district head quarter. In urban areas, two municipal wards have been selected purposively out of which one ward is from urban-core and another from urban-periphery from each district.

In the third stage, all the inhabitants of each village and ward have been enlisted separately. Thus, there are eight lists of inhabitants –

- d. For District-I, (District Imphal West), Sub-division: Lamphelpat

List-I for Village-I (Village Meetei Langol) (Within 5 km away from District HQ)

List-II for Village-II (Village Lamshang) (Beyond 10 km away from District HQ)

List-III for Ward-I (Core) (Lamphel) Ward no.5

List-IV for Ward—II (Periphery) (Iroisemba) Ward no.27

In the third stage, twenty five sample respondents have been finally selected from each of eight lists separately on the basis of Simple Random Sampling without Replacement Method (SRSWOR Method). In this way, a size of total two hundred sample respondents will be taken into consideration.

- e. **Number of samples:** Altogether 100 samples have been collected for the analysis. Out of which 50 have been selected from its urban area (of which 25 samples from urban-core and 25 from urban-periphery) and the other 50 from the rural areas (25 samples from each village).
- f. **Collection of data :** Data was collected following the Survey Method. At first, a primary schedule was prepared on the basis of existing literature concerned and a pilot survey was made randomly by personally interrogating some members of the sample size in order to examine the module of the schedule. On the basis of primary investigation, addition and alteration was made in primary schedule and in this way, preparation of schedule was finalised. Final data collection was made by personally interviewing and interrogating the head of the households by visiting door to door strictly with the help of pre-tested survey schedule in the study area. The secondary information was obtained both from the village development board for villages and from municipal councils for wards. Informal interviews were carried out with the person from villages and wards on the way to gain their view and knowledge on food, food security and the extent

and problems of food security. Besides, group discussion with the group of people from villages and wards was held to obtain information on how and when they get themselves involved in food security programmes.

- g. **Statistical analysis:** Appropriate statistical techniques and analytical tools have been used for data collection, data analysis and presentation to ensure statistically valid interpretation of outcome results. 100 sample respondents are classified into 3 groups on the basis of annual income, group-1 (0-3 lakh), group-2 (3-5 lakh) and group-3 (>5 lakh).

RESULTS AND DISCUSSION

The livelihood security status prevailing in the study area has been affected by some socio-economic factors like age, sex, literacy level, occupational structure as well as food consumption, energy and nutrient intake. In view of this, an in-depth study of these characteristics of the sample respondents has become necessary. Keeping this in mind, the various features have been analysed and presented in this chapter.

Socio economic characteristics of the study area

This section covers the socio-economic profile of the sample area of both Imphal West and Bishnupur Districts of the State Manipur.

Frequency distribution of sample households according to income size of the sample households in Imphal West District

This sub-section includes area-wise frequency distribution of sample households on the basis of income size of the sample households in Imphal West district. The table 1 presents the income-wise frequency distribution of the sample households according to total operational size of land holding in Imphal West District. The table shows that a large majority of urban sample households are middle income group (68 per cent) while 18 per cent of rural sample households belong to middle income group. The average income for rural and urban is Rs.5, 93,706.50 and Rs.10, 23,495.19 respectively.

Income-wise and food item-wise annual consumption of food of the sample households in Imphal West District

The table 1.1 presents the income-wise and food item-wise annual per consumer unit consumption of food of the sample households in Imphal West District. The table reveals that among the various food items, the percentage share for rice is the highest for both rural and urban sample households accounting for 57.27 per cent and 16.25 per cent respectively. For rural sample households, rice is followed vegetables (15.66 per cent), fruits (8.61 per cent), fish (4.47 per cent), meat (3.91

per cent), spices (2.68 per cent) and milk (2.03 per cent). While for urban sample households, rice is followed by vegetables (14.31 per cent), meat (2.85 per cent), milk (2.73 per cent), fruits (2.35 per cent), fish (2.24 per cent) and sugar (1.96 per cent). The per consumer unit egg consumption is 27.50 nos. for rural sample households and 82.34 nos. for urban sample households. Sugar, tea and wheat represent a low percentage of the total quantity of food consumed. The consumption pattern shows that rice constitute the highest percentage of food quantity consumed by both rural and urban sample households.

The overall total quantity of food consumed per consumer unit per annum is found to be 411.22 for rural sample households and 498.46 for urban sample households. For rural households, the total quantity (units) of food consumed is the highest in Group-1 (431.72) and the lowest in Group-2 (317.15). For urban households, total quantity (units) of food consumed is the highest in Group-2 (2913.15) and the lowest in Group-3 (590.66).

Income-wise and item-wise annual expenditure on food and non-food items in Imphal West district

This sub-section consists of food item-wise annual expenditure on food and non-food items per consumer unit for the sample households across the various size groups in rural as well as urban areas of both Imphal West district of the State Manipur.

The table 1.2 and 1.3 presents the income-wise and item-wise annual per consumer unit expenditure on food and non-food items in rural and urban area of Imphal West District. The overall annual per consumer unit food expenditure in the study area is found to be Rs. 491,364.95 for rural sample households and Rs.468,541.59 only for urban sample households. The rural sample households spend about 52.14 per cent of the total consumption expenditure on food items, while the urban sample households spend about 37.41 per cent on food items. The expenditure of the rural sample households on all food items is found to be higher than that of urban sample households.

The overall annual per consumer unit non-food expenditure is Rs. 451,073.02 for rural sample households and Rs. 783,828.01 for urban households. The rural sample households spend about 47.86 per cent of the total expenditure on non-food items, while the urban households spend about 62.59 per cent on non-food items. The expenditure of the urban sample households on all the non-food items is found to be higher than that of rural sample households. It is found out that urban sample households spend more on non-food items with 62.59 per cent compared to food items (37.41 per cent) due to higher income of urban sample households,

whereas, it is just the opposite for rural sample households.

The overall grand total expenditure is higher for urban sample households (Rs. 1,252,369.60) than that of rural sample households (Rs. 942,437.97). Food items constitute for major portion of the total expenditure for rural sample households and non-food items for urban sample households. Among the various size groups, for rural sample households, the overall per consumer unit expenditure is the highest in Group-1 (Rs. 2,299,500.76) and the lowest in Group-2 (Rs. 527,813.14). For urban sample households, it is found to be the highest in Group-2 (Rs. 2,148,511.86) and the lowest in Group-3 (Rs. 1,608,596.94)

Income-wise and food item-wise calorie intake in Imphal West District

The table 1.4 presents the income-wise and food item-wise calorie intake per day per consumer unit of the sample households in Imphal West District. The table reveals that for rural sample households, rice provide the highest energy (kcal per day per CU) to the sample respondents (1,357.56), followed by edible oil (2,47.14), vegetables (114.42), milk (66.09), pulses (59.77), fish (29.56), fruits (28.06), meat(27.05), sugar (23.55), egg (4.63), wheat (2.61) and spices (0.04).The corresponding percentage share of these food items are in the order of 69.25,12.61, 5.84, 3.37, 3.05, 1.51, 1.43, 1.38, 1.20, 0.24, 0.13, 0.002 respectively. For urban sample households, rice provide the highest energy (kcal per day per CU) to the sample respondents (1,290.00), followed by vegetables (301.09) edible oil (219.72), egg (195.44), milk (114.52), sugar (63.39), pulses (60.14), meat (26.67), fish (18.92), fruits (11.46) and spices (0.01). The corresponding percentage share of these food items are in the order of 56.05, 13.08, 9.55, 8.49, 4.98, 2.75, 2.61, 1.16, 0.82 and 0.50 respectively.

The total energy derived from the consumption of all food items is higher for urban households (2,301.36 kcal per day per CU) as compared to rural households (1,960.48 kcal per day per CU). The overall total calorie intake per consumer unit for rural households is the highest in Group-1 (3,636.27) and the lowest in Group-2 (2,245.15). For urban households, overall total calorie intake is the highest in Group-2 (4,140.05) and the lowest in Group-3 (2,764.02). The percentage of calorie intake among the food items is the highest for rice (69.25 per cent) for rural households and it is 56.05 per cent for urban households.

Income-wise and food item-wise protein intake in Imphal West district

This sub-section contains food item-wise protein intake per day per consumer unit for the sample

Table 1: Income-wise frequency distribution of the sample households according to income size in Imphal West District.

Income Groups	Income size	Rural			Urban		
		Frequency	%	Average income (Rs.)	Frequency	%	Average income (Rs.)
Group- 1	Upto 3 lacs	41	82	2,48,950.95	0	0	0
Group-2	3 - 5 lacs	9	18	3,44,755.55	34	68	4,46,496.94
Group-3	>5 lacs	0	0	0	16	32	5,76,998.25
Total		50	100	5,93,706.50	50	100	10,23,495.19

Table 1.1: Income-wise and food item-wise annual per consumer unit consumption of food of the sample households in Imphal West District (Units per Annum) (2013-14)

Food items	Group-1		Group-2		Group-3		Overall	
	Rural (n=41)	Urban (n=0)	Rural (n=9)	Urban (n=34)	Rural (n=0)	Urban (n=16)	Rural (n=50)	Urban (n=50)
Rice(kg)	247.07 (57.23)	0.00 (0.00)	182.56 (57.56)	416.07 (70.44)	0.00 (0.00)	1600.34 (54.93)	235.53 (57.27)	336.55 (67.52)
Wheat(kg)	0.13 (0.03)	0.00 (0.00)	0.70 (0.22)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.23 (0.05)	–
Pulses(kg)	7.37 (1.71)	0.00 (0.00)	11.55 (3.64)	11.16 (1.89)	0.00 (0.00)	76.90 (2.64)	8.11 (1.97)	10.12 (2.03)
Edible oil(ltr)	7.11 (1.65)	0.00 (0.00)	5.19 (1.64)	14.94 (2.53)	0.00 (0.00)	115.18 (3.95)	6.77 (1.65)	13.95 (2.79)
Spices(gm)	11.29 (2.62)	0.00 (0.00)	9.76 (3.08)	2.85 (0.48)	0.00 (0.00)	28.16 (0.97)	11.02 (2.68)	2.86 (0.57)
Tea(kg)	3.64 (0.84)	0.00 (0.00)	3.78 (1.19)	3.93 (0.67)	0.00 (0.00)	15.51 (0.53)	3.67 (0.89)	3.19 (0.64)
Sugar(kg)	3.21 (0.74)	0.00 (0.00)	3.27 (1.03)	11.52 (1.95)	0.00 (0.00)	57.84 (1.99)	3.22 (0.78)	9.75 (1.95)
Milk(kg)	8.96 (2.08)	0.00 (0.00)	5.63 (1.77)	15.25 (2.58)	0.00 (0.00)	97.98 (3.36)	8.36 (2.03)	13.61 (2.73)
Fish(kg)	20.07 (4.65)	0.00 (0.00)	10.76 (3.39)	13.43 (2.27)	0.00 (0.00)	61.55 (2.11)	18.40 (4.47)	11.18 (2.24)
Meat(kg)	17.68 (4.09)	0.00 (0.00)	8.69 (2.74)	16.32 (2.76)	0.00 (0.00)	94.60 (3.25)	16.07 (3.91)	14.23 (2.85)
Vegetables(kg)	66.49 (15.40)	0.00 (0.00)	54.88 (17.31)	74.12 (12.55)	0.00 (0.00)	637.27 (21.88)	64.41 (15.66)	71.32 (14.31)
Fruits(kg)	38.70 (8.96)	0.00 (0.00)	20.38 (6.43)	11.06 (1.87)	0.00 (0.00)	127.82 (4.39)	35.42 (8.61)	11.70 (2.35)
Total	431.72 (100.00)	0.00 (0.00)	317.15 (100.00)	590.66 (100.00)	0.00 (0.00)	2913.15 (100.00)	411.22 (100.00)	498.46 (100.00)
Egg(no.)	28.72	0.00	21.93	93.01	0.00	578.08	27.50	82.34

Figures in parentheses indicate the percentages to the total; n = no. of sample households

Table 1.2: Income size group wise average annual food and non-food expenditure by cu in rural area of Imphal West

Income Size Group	Food expenditure per Consumer unit	Non-food expenditure per CU	Total
Income SizeGroup-I	1,217,044.53 (52.93)	1,082,456.23 (47.07)	2,299,500.76(100.00)
Income SizeGroup-II	257,050.32 (48.70)	270,762.83 (51.30)	527,813.14 (100.00)
Income SizeGroup-III	0.00 (0.00)	0.00(0.00)	0.00(0.00)
PooledAverage	491,364.95 (52.14)	451,073.02 (47.86)	942,437.97(100.00)

Figures in parentheses indicate the percentages to the total

Table 1.3: Income size group wise average annual food and non-food expenditure by cu in urban area of Imphal West

Income Size Group	Food expenditure per Consumer unit	Non-food expenditure per CU	Total
Income SizeGroup-I	0.00(0.00)	0.00(0.00)	0.00(0.00)
Income SizeGroup-II	973,586.36(45.31)	1,174,925.51(54.69)	2,148,511.86(100.00)
Income SizeGroup-III	432,038.41(26.86)	1,176,558.53(73.14)	1,608,596.94(100.00)
PooledAverage	468,541.59(37.41)	783,828.01(62.59)	1,252,369.60(100.00)

Figures in parentheses indicate the percentages to the total

Table 1.4: Income-wise and food item-wise calorie intake per day per consumer unit of the sample households in Imphal West District (kcal per day per CU) (2013-14)

Food items	Group-1		Group-2		Group-3		Overall	
	Rural (n=41)	Urban (n=0)	Rural (n=9)	Urban (n=34)	Rural (n=0)	Urban (n=16)	Rural (n=50)	Urban (n=50)
Rice	2342.12 (64.41)	0.00 (0.00)	1730.57 (77.08)	2317.36 (55.97)	0.00 (0.00)	1552.64 (56.17)	1357.56 (69.25)	1290.00 (56.05)
Wheat	1.20 (0.03)	0.00 (0.00)	6.63 (0.30)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	2.61 (0.13)	0.00 (0.00)
Pulses	69.82 (1.92)	0.00 (0.00)	109.47 (4.88)	105.81 (2.56)	0.00 (0.00)	74.61 (2.70)	59.77 (3.05)	60.14 (2.61)
Edible oil	613.42 (16.87)	0.00 (0.00)	128.00 (5.70)	368.48 (8.90)	0.00 (0.00)	290.66 (10.52)	247.14 (12.61)	219.72 (9.55)
Spices	0.07 (0.002)	0.00 (0.00)	0.06 (0.003)	0.02 (0.0005)	0.00 (0.00)	0.02 (0.001)	0.04 (0.002)	0.01 (0.0004)
Sugar	35.03 (0.96)	0.00 (0.00)	35.62 (1.59)	125.61 (3.03)	0.00 (0.00)	64.55 (2.34)	23.55 (1.20)	63.39 (2.75)
Milk	121.77 (3.35)	0.00 (0.00)	76.49 (3.41)	207.28 (5.01)	0.00 (0.00)	136.27 (4.93)	66.09 (3.37)	114.52 (4.98)
Fish	57.74 (1.59)	0.00 (0.00)	30.96 (1.38)	38.62 (0.93)	0.00 (0.00)	18.12 (0.66)	29.56 (1.51)	18.92 (0.82)
Meat	54.40 (1.50)	0.00 (0.00)	26.75 (1.19)	50.22 (1.21)	0.00 (0.00)	29.80 (1.08)	27.05 (1.38)	26.67 (1.16)
Egg	7.87 (0.22)	0.00 (0.00)	6.01 (0.27)	25.48 (0.61)	0.00 (0.00)	560.85 (20.29)	4.63 (0.24)	195.44 (8.49)
Vegetables	277.70 (7.64)	0.00 (0.00)	65.56 (2.92)	885.39 (21.38)	0.00 (0.00)	17.87 (0.65)	114.42 (5.84)	301.09 (13.08)
Fruits	55.13 (1.52)	0.00 (0.00)	29.04 (1.29)	15.76 (0.38)	0.00 (0.00)	18.64 (0.67)	28.06 (1.43)	11.46 (0.50)
Total	3636.27 (100.00)	0.00 (0.00)	2245.15 (100.00)	4140.05 (100.00)	0.00 (0.00)	2764.02 (100.00)	1960.48 (100.00)	2301.36 (100.00)

Figures in parentheses indicate the percentages to the total, n = no. of sample households

Table 1.5: Income-wise and food item-wise protein per day per consumer unit of the sample households in Imphal West District (g per day per CU) (2013-14)

Food items	Group-1		Group-2		Group-3		Overall	
	Rural (n=41)	Urban (n=0)	Rural (n=9)	Urban (n=34)	Rural (n=0)	Urban (n=16)	Rural (n=50)	Urban (n=50)
Rice	50.77 (58.93)	-	37.51 (59.27)	85.49 (67.85)	-	328.84 (55.97)	29.43 (59.08)	138.11 (58.06)
Wheat	0.07 (0.08)	-	0.23 (0.36)	0.00 (0.00)	-	0.00 (0.00)	0.10 (0.20)	0.00 (0.00)
Pulses	4.95 (5.75)	-	7.76 (12.26)	7.50 (5.95)	-	51.69 (8.80)	4.24 (8.51)	19.73 (8.30)
Edible oil	0.00 (0.00)	-	0.00 (0.00)	0.00 (0.00)	-	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Spices	0.002 (0.002)	-	0.002 (0.003)	0.001 (0.001)	-	0.01 (0.002)	0.001 (0.002)	0.002 (0.001)
Sugar	0.01 (0.001)	-	0.01 (0.02)	0.03 (0.02)	-	0.16 (0.03)	0.01 (0.02)	0.06 (0.03)
Milk	6.33 (7.35)	-	3.98 (6.29)	10.78 (8.56)	-	69.25 (11.79)	3.44 (6.91)	26.68 (11.22)
Fish	7.70 (8.94)	-	4.13 (6.53)	5.15 (4.09)	-	23.61 (4.02)	3.94 (7.91)	9.59 (4.03)
Meat	10.85 (12.59)	-	5.33 (8.42)	10.01 (7.95)	-	58.06 (9.88)	5.39 (10.82)	22.69 (9.54)
Eggs	0.63 (0.73)	-	0.48 (0.76)	2.04 (1.62)	-	12.67 (2.16)	0.37 (0.74)	4.90 (2.06)
Vegetables	4.34 (5.04)	-	3.58 (5.66)	4.83 (3.83)	-	41.55 (7.07)	2.64 (5.30)	15.46 (6.50)
Fruits	0.51 (0.59)	-	0.27 (0.43)	0.15 (0.12)	-	1.69 (0.29)	0.26 (0.52)	0.61 (0.26)
Total	86.16 (100.00)	-	63.29 (100.00)	125.99 (100.00)	-	587.52 (100.00)	49.81 (100.00)	237.84 (100.00)

Figures in parentheses indicate the percentages to the total, n= No. of sample households

households across the various groups in rural and urban areas of both Imphal West district of the State Manipur.

The Table 1.5 presents the income-wise and food item-wise protein intake of the sample households per day per consumer unit in Imphal West District. The table reveals that for rural sample households, rice provides the highest protein intake to the sample households (29.43 gm per day per CU), followed by meat (5.39), pulses (4.24), fish (3.94), milk (3.44), vegetables (2.64), eggs (0.37), fruits (0.26), wheat (0.10) and spices (0.001). For urban households, rice also provides the highest protein intake to the sample households (138.11), followed by milk (26.68), meat (22.69), pulses (19.73), vegetables (15.46), fish (9.59), eggs (4.90), sugar (0.06) and spices (0.002). The overall total protein nutrient derived from the consumption of all food items is higher for urban households (237.84 gm per day per CU) as compared to rural those in households (49.81 gm per day per CU). The overall total protein intake for rural households is the highest in Group-1 (86.16) and the lowest in Group-2 (63.29). For urban households, overall

total protein intake is the highest in Group-3 (587.52) and the lowest in Group-2 (125.99). The percentage of protein intake among the food items is the highest for rice (59.08) for rural households and it is 58.06 per cent for urban households.

Income-wise and food item-wise fat intake in Imphal West district

This sub-section contains food item-wise fat intake per day per consumer unit for the sample households across the various groups in rural and urban areas of both Imphal West and Bishnupur Districts of the State Manipur.

The table 1.6 presents the income-wise and food item-wise fat intake of the sample households per day per consumer unit in Imphal West District. The table reveals that for rural sample households, fruits provides the highest amount of fat to the sample households (18.95 gm per day per CU), followed by edible oil (11.24), sugar (3.56), rice (1.96), fish (0.61), milk (0.56), meat (0.37), egg (0.31), pulses (0.18), vegetables (0.14), wheat (0.01) and spices (0.002). For urban households, fruits also

Table 1.6: Income-wise and food item-wise fat intake per day per consumer unit of the sample households in Imphal West District (gm per day per CU) (2013-14)

Food items	Group-1		Group-2		Group-3		Overall	
	Rural (n=3)	Urban (n=18)	Rural (n=26)	Urban (n=25)	Rural (n=7)	Urban (n=2)	Rural (n=50)	Urban (n=50)
Rice	3.38 (5.05)	0.00 (0.00)	2.50 (5.34)	5.70 (4.55)	0.00 (0.00)	2.24 (2.49)	1.96 (5.17)	2.65 (3.69)
Wheat	0.01 (0.01)	0.00 (0.00)	0.03 (0.006)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.01 (0.03)	0.00 (0.99)
Pulses	0.21 (0.31)	0.00 (0.00)	0.33 (0.70)	0.32 (0.26)	0.00 (0.00)	0.23 (0.26)	0.18 (0.48)	0.18 (0.25)
Edible oil	19.49 (29.14)	0.00 (0.00)	14.22 (30.40)	40.94 (32.65)	0.00 (0.00)	32.30 (35.87)	11.24 (29.66)	24.41 (33.99)
Spices	0.004 (0.01)	0.00 (0.00)	0.001 (0.002)	0.0003 (0.0002)	0.00 (0.00)	0.0003 (0.0003)	0.002 (0.01)	0.00 (0.00)
Sugar	6.55 (9.79)	0.00 (0.00)	4.12 (8.80)	11.16 (8.90)	0.00 (0.00)	7.34 (8.15)	3.56 (9.40)	6.16 (8.58)
Milk	1.10 (1.64)	0.00 (0.00)	0.59 (1.30)	0.74 (0.59)	0.00 (0.00)	0.35 (0.39)	0.56 (1.48)	0.36 (0.50)
Fish	1.23 (1.84)	0.00 (0.00)	0.60 (1.30)	1.13 (0.90)	0.00 (0.00)	0.67 (0.74)	0.61 (1.61)	0.60 (0.84)
Meat	0.63 (0.94)	0.00 (0.00)	0.48 (1.00)	2.04 (1.63)	0.00 (0.00)	1.30 (1.44)	0.37 (0.98)	1.11 (1.55)
Egg	0.51 (0.76)	0.00 (0.00)	0.42 (0.90)	0.57 (0.45)	0.00 (0.00)	0.50 (0.56)	0.31 (0.82)	0.36 (0.50)
Vegetables	0.32 (0.48)	0.00 (0.00)	0.10 (0.20)	0.09 (0.07)	0.00 (0.00)	0.11 (0.12)	0.14 (0.37)	0.07 (0.10)
Fruits	33.44 (50.00)	0.00 (0.00)	23.40 (50.00)	62.69 (50.00)	0.00 (0.00)	45.02 (49.99)	18.95 (50.01)	35.90 (49.99)
Total	66.88 (100.00)	0.00 (0.00)	46.80 (100.00)	125.38 (100.00)	0.00 (0.00)	90.05 (100.00)	37.89 (100.00)	71.81 (100.00)

Figures in parentheses indicate the percentages to the total; n= No. of sample households

provides the highest amount of fat to the sample households (35.90 gm per day per CU), followed by edible oil (24.41), sugar (6.16), rice (2.65), meat (1.11), fish (0.60), milk and egg (0.36), pulses (0.18) and vegetables (0.07).

The total fat nutrient derived from the consumption of all food items is higher for urban households (71.81 gm per day per CU) as compared to those for rural households (37.89 gm per day per CU). The total fat intake for rural households is the highest in Group-1 (66.88) and lowest in Group-2 (46.80). For urban households, total fat intake is the highest in Group-2 (125.38) and the lowest in Group-3 (90.05). The percentage of fat intake among the food items is the highest for edible oil (50.01 per cent) for rural households and it is 49.99 per cent for urban households.

Major findings of the study have been summarized below:

1. In Imphal West district, it is found that the income is found to be upto 3 lacs for most of the sample households. The average size income is more in the case of urban sample households.
2. It is found that the percentage of annual per consumer unit consumption of food is higher for rural sample households in Imphal West district. Rice accounts for highest quantity among the food items consumed.
3. The overall annual per consumer unit expenditure on food and non-food items is found to be higher for urban sample households.
4. The annual per CU food and non-food expenditure across various size groups of Imphal West District for both rural sample households is the highest in Group-1 whereas in case of urban sample households, it is highest in Group-II and lowest in Group-III.

5. In rural areas, the percentage of annual per consumer unit expenditure is higher for food items, while it is reverse in urban areas.
6. For the urban sample households of Imphal West District, calorie intake per day per CU is found to be higher than the RDA for all group sizes. For rural sample households, the calorie intake is lower than the RDA in Group-2 and higher than the RDA in all other group sizes. The overall calorie intake is lower than the RDA in rural sample households and higher than the RDA for urban sample households.
7. For rural and urban sample households, the protein intake per day per CU is higher than the RDA in all group sizes.
8. The overall protein intake per day per CU of Imphal West District is found to be less than the RDA for rural sample households.
9. For Imphal West rural sample households, the fat intake per day per CU is higher than the RDA in all the Groups. Across the various size groups, it is found to be the highest in Group-1 and the lowest in Group-2.
10. Similarly, in urban sample households, the fat intake per day per CU is higher than the RDA in all the Groups. Across the various size groups, it is found to be the highest in Group-2 and the lowest in Group-3.
11. The overall fat intake per day per CU is found to be more than the RDA for both rural and urban sample households.

The present study has been conducted one district of Manipur, covering two villages and two wards. The present study has shown some light on the important attributes relating to food security. However, because of time and resource constraints, the study has been confined only to one district considering the population which comprises of tribal and non-tribal households in this district. Results of this study may, therefore, not be a truly representative of the state or the country. Therefore, future research related to the present study may be conducted on the following lines:

1. A study may be conducted to identify the nature of food security in different districts of Manipur and further in different parts of India.
2. Various policies and programmes adopted and especially implemented by the Government to enhance food security may be studied.
3. A study may be done on migrant workers coming from other states to Manipur to present a better picture of their socio-economic status with the help of more number of independent variables to be conducted in vast areas.
4. A study on food habit and nutrient intake especially among the different tribes may be carried out.
5. Preference, availability and nutrient contents of wild plants and animals consumed can be studied.
6. Since women play an active part in agricultural activities in rural areas, their role in agriculture for providing food security may be studied.

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