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LEVEL AND PATTERN OF CONSUMER EXPENDITURE IN BUFFER VILLAGES OF NOKREK AND MANAS BIOSPHERE RESERVE

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Abstract : Level and pattern of consumer expenditure of the villages of any tribal community located in the Biosphere Reserve area in India indicate interesting facts about the relative dependence on the forest ecosystem and the state of rural economy they subsist on.

Nokrek Biosphere Reserve, situated in Garo Hills of Meghalaya, a land locked territory, inhabited mainly by the Garo tribe is quite behind the rest of country on economic and infrastructural front. Being away from the mainland society, devoid of cheap transportation network like railways coupled with absence of industry, this area seems to be underdeveloped and backward economically.

Manas Biosphere Reserve, situated in the foothills of the mountain range of Bhutan, being located in Assam, a part of Bodo Territorial Council and inhabited mainly by the Bodo, Santal and other tribes is quite behind the rest of country on economic and infrastructural front.

The present piece of study in villages of the buffer zone of the Nokrek & Manas Biosphere Reserve is an attempt to compare the pattern of consumption and other socio economic indicators of the villages with the rest of the country through the broad heads as household and population, work force, level of consumption, pattern of consumption, quantity of cereal consumption etc. It is interesting to note that the average monthly per capita consumer expenditure of these villagers are relatively higher than the national average of the poorest section in other parts of the country.

Key Words : Biosphere, Reserve, Consumption, Ecosystem

Introduction

The quality of life of any place in India is always a point of interest to anybody who likes to observe our society. Quality of life may generally be reflected through parameters of consumer expenditure of any family under study (NSS Report no. 538, 2011). Level and pattern of consumer expenditure of the families in the villages of tribal communities located in the Biosphere Reserve areas in India indicate interesting facts about relative dependence on the forest ecosystem and the state of rural economy they subsist on.

The present piece of study in the villages of the buffer zone of the Nokrek Biosphere Reserve and Manas Biosphere Reserve is an attempt to compare the level and pattern of consumption and other socio economic indicators of the villages with the rest of the country through the broad heads like household and population, level of consumer expenditure, pattern of consumer expenditure, per capita cereal consumption etc. (NSS Report no. 538, 2011).

India is a large country with second highest population in the world. Among this

population about 8 percent belongs to various tribes. Of the total tribal population of the country 12 percent resides in the Northeast India (84 percent in the mainland states of Odisha, Maharashtra, Gujarat, Rajasthan, West Bengal and Chhattisgarh; 1 percent in the Northern India, 3 percent in the Southern India)(Census, 2011).

We can have various average results of indicators regarding level and pattern of consumer expenditure through which we can observe the quality of life in a place and compare it with all India results. But the main obstacle here is that such survey results are available only up to state level and in some cases up to district level. So other than direct study of the area under reference, there is no other way of getting the figures regarding level and pattern of consumer expenditure at the village level through which quality of life in Biosphere Reserve areas may be observed.

Objective

We may have various indicators of level of living from Consumer Expenditure Survey. Through this survey we can have estimates pertaining to various facets of household consumer expenditure. This study aims at generating estimates of average monthly per capita consumer expenditure (MPCE) of a household, its distribution over households and persons and its break up by commodity groups. These indicators are amongst the most important measures of the level of living of the respective domains of the population.

In other words, (a) to observe various indicators of level of living, Consumer Expenditure Survey is a useful one and this has comparability with all India averages, (b)estimation of average monthly per capita consumer expenditure (MPCE) of a household has been generated to observe level and pattern of consumer expenditure. It is assumed that the quality of life has to be reflected in the average per capita expenditure on non-food items. Apart from expenditure on food items and from this part of analysis on non-food items, we can reach to the estimation of pattern of life.

Methodology

In India, economic status of household is mainly studied with respect to and in terms of data on consumer expenditure, more specifically per capita consumer expenditure. India has a well-established system of statistical data collection on consumer expenditure operated by National Sample Survey Office (NSSO) but there is no regular survey on incomes, either rural or urban.

Household income is difficult to measure with accuracy because income is a derived variable. Hence it is important to identify and measure each component of income accurately to derive reliable estimates. Thus income estimates from household surveys are subject to certain limitations (Aparajita Bakshi 2008). The problem of defining household income also arises from the fact that the household produces goods and services for sale in the market as well as for self-consumption. The monetized part of the household incomes can be accounted for, but it is often difficult to value the non-monetized part of the household incomes. Moreover, it is generally understood that higher income groups tend to underreport

incomes and income from certain activities are more difficult to measure than others. As a result, there is no uniform definition of household income accepted and applied all over the world.

Consumer expenditure, as a more viable way to assess economic status, aims at generating estimates of average monthly per capita consumer expenditure (MPCE) of a household, its distribution over households and persons, and its break up commodity groups. These indicators are amongst the most important measures of the level of living of the respective domains of the population.

The consumption of any good or service by a household or a person occurs in the form of a flow over time (S. Gangopadhyay & W. Wadhwa 2004). The survey needs to record the volume of consumption over a short period such as a day, or a long period such as a year. The time period for which consumption is recorded is called the reference period or recall period. It may vary from item to item. Because the respondents are asked to recall and report the volume of consumption.

The expenditure incurred by a household on domestic consumption during the reference period is the household's consumer expenditure. Expenditure incurred towards productive enterprises of the household is excluded from household consumer expenditure. Self-consumed produce of own farm or other household enterprise is valued and included in household consumer expenditure.

For this study the methodology adopted by NSSO for consumer expenditure survey has been used to avail opportunity to compare it's all India results and state wise results with our village level study results. During field study the data on monthly per capita expenditure (MPCE) was generated for about 20 percent of the families.

Study Area

We have visited buffer zone of two biosphere reserves in Meghalaya and Assam in North East India. These are Nokrek Biosphere Reserve in Meghalaya and Manas Biosphere Reserve in Assam. Within these areas present study is restricted to the village Darichikgre of Nokrek Biosphere Reserve and the village Ultapani of Manas Biosphere Reserve.

Among the four Biosphere Reserves in North East India, the Nokrek Biosphere Reserve (other three being the Manas BR of western or lower Assam, Dibru-Saikhowa in eastern or upper Assam and Dihang-Dibang BR in the Arunachal Pradesh Himalayas) is a unique one situated in the geologically old plateau of Meghalaya exposed to the vigour of the south-west monsoon climate (Compendium on Indian Biosphere Reserves, 2012). This geographically isolated region is the traditional habitat of the Garo tribal community who were predominantly *jhum* cultivators till near past and are now in an economic transition towards settled and plantation agriculture. The region is historically known as malaria endemic with certain altitudinal and seasonal variations other than most prevalent communicable diseases like respiratory infections and diarrhoeal diseases.

The Meghalaya state (the abode of cloud) is coterminous with the plateau of same name, a geological extension of the Chhotanagpur plateau, and receives highest rainfall in the

world from south-west monsoon. The central axis of the plateau runs east-west with two high points viz., the Laitkor or Shillong peak (1961m) on the east and Nokrek (1412m) on the west in Garo Hills. (Fig. 1).

Meghalaya is a tribal state in Northeast India situated along the international boundary with Bangladesh on the south and shares state boundary with Assam on the north, west and east.This is one of the smaller states in India in terms of area (22,429 Sq. km.) and population (29,64,007 in 2011) having 86% Scheduled Tribe population dominated by three groups viz., the Khasis, Garos and the Jaintias. All these three communities are matrilineal in societal form (Gowloog and Mukherjee, 2013).

Manas, gets its name after the serpent Goddess 'Manasa' (Durga), was established on 14.3.1989 with an area of 2837 sq.km. The area of the Reserve falls in six districts: Kokrajhar, Bongaigaon, Barpeta, Nalbari, Kamrup and Darrang in the state of Assam in India (Fig. 2). The reserve extends along the Himalayan forest hills to the north of Brahmaputra valley. The Manas River is the largest Himalayan tributary of the Brahmaputara River. Manas was described as a World Heritage site by UNESCO in 1985 (Compendium on Indian Biosphere Reserves, 2012).

The location of Manas Biosphere Reserve at the confluence of the Indian and Indo-Chinese realm along with hot and humid climate makes this reserve a treasure of immense diversity and endemism of the flora and fauna (Compendium on Indian Biosphere Reserves, 2012).

The village Ultapani is under Bodo Territorial Council, an autonomous council to protect customary laws in Sixth Schedule areas.

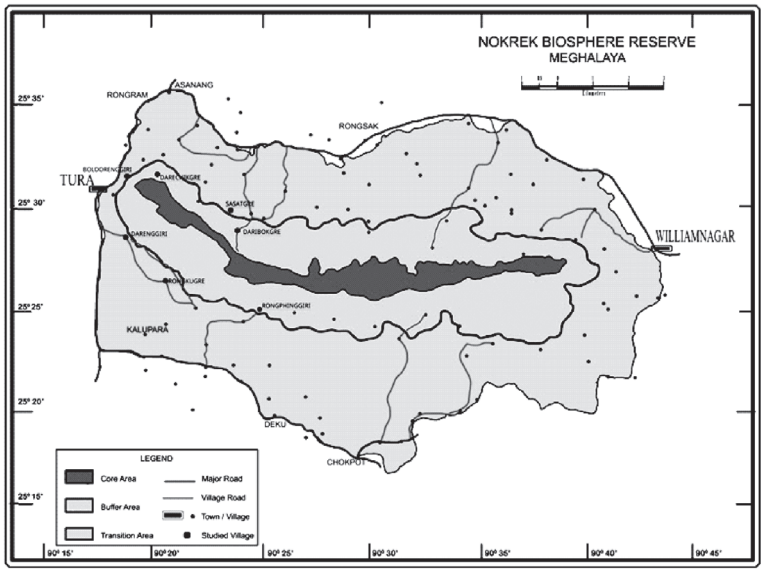


Figure 1: Location and Profile of the Study Area, NBR.
Source: Based on NBR map supplied by the State Forest Deptt., Meghalaya

The Nokrek Biosphere Reserve is spread over parts of all three Garo Hill districts namely West Garo Hills, East Garo Hills and South Garo Hills.

The Garo Hills or the Western Meghalaya with relatively lower altitude enjoys a fairly higher air temperature for major part of the year (February to October). The average annual rainfall is also lower (3300 mm) in the Western Meghalaya and winter is particularly dry.

The natural vegetation of Meghalaya varies from sub-tropical pine forest over the higher altitude zone to the dense mixed tropical wet evergreen type in areas with moderate altitude but receiving high rainfall. On the other hand, tropical moist deciduous forest cover is widely found in the lower hills and valleys of the Garo Hills districts.

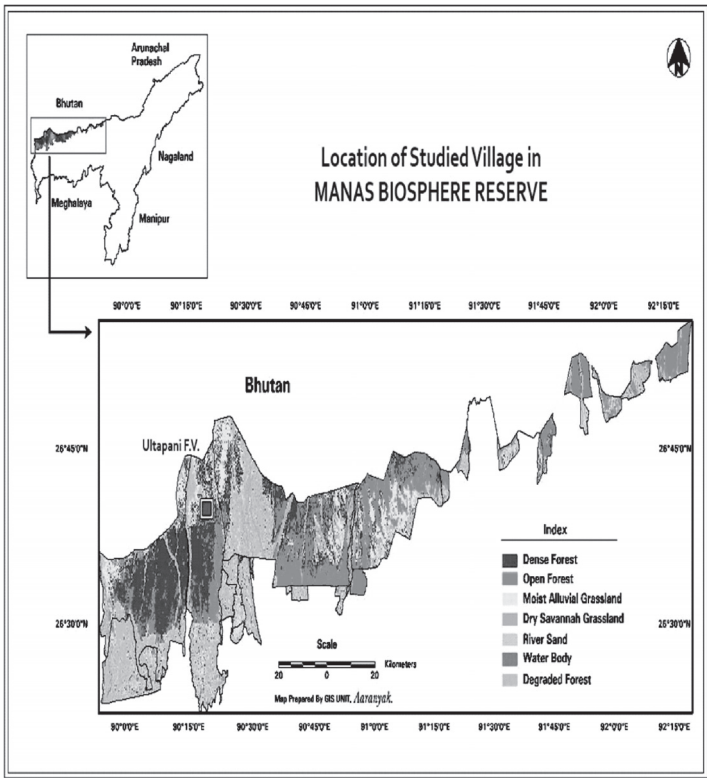


Figure 2: Location and Profile of the Study Area, MBR.

Source: Based on NBR map supplied by the State Forest Deptt., Assam.

Accessibility and Transport Network

Darichikgre village is located at a distance of 14 km from Tura, HQ of Garo Hills. The village is not approachable by metalled road. Villagers have to cover 5/8 km to get bus route. Only small car can reach the village.

Ultapani village is situated in dense forest of Manas and it is 55 km away from Kokrajhar, the district head quarter. It is approachable by metalled road.

Profile of Studied Villages

The name of the studied village of Nokrek Biosphere Reserve is Darichikgre. The village under study is situated in the buffer zone of Nokrek Biosphere Reserve in West Garo Hills, Meghalaya. The village is inhabited by Garo tribal people. It is devoid of basic modern facilities. To avail any facility relating to education or medical support or any other amenities, inhabitant of this village have to depend on nearest district head quarter i.e. Tura.

Table 1 : Basic Amenities Profile of the Village Darichikgre

Nearest metalled road	5Km
Primary School	Within village
Middle/ Secondary/ High Secondary School	14 km
College	14 km
Post Office	5 km
Bank	14 km
Police Station	13 km
Bus stop	5/8 km
P.H.C.	4km
Drinking water, Electricity	Within village
Main market	14 km

Source: Field Survey

From the above table it is evident that to avail education above primary level or to avail medical facility, villagers have to cover at least 14 km through hilly terrain without having proper mode of conveyance. This is true for other day to day necessities also.

In Manas Biosphere Reserve we have studied the village named Ultapani. It is situated in the buffer zone of Manas Biosphere Reserve in Assam. The village is inhabited by Bodo, Nepali and Adibasi people. It is devoid of basic modern facilities. To avail any facility relating to education or medical support or any other amenities, inhabitants of this village have to depend on nearest district head quarter i.e. Kokrajhar which is 55 km away.

Table 2 : Basic Amenities Profile of the Village Ultapani

Primary / Middle School	within village
H.S. School / College	55 km
Post Office	within village
PHSC	within village
Bus Stop	within village
Bank	55 km
Medicine Shop	within village
Drinking water, electricity	within village

Source: Field Survey

Village Economy

Agro-climatic factors of Nokrek Biosphere Reserve area are quite favourable for horticulture. Plantation of areca nut and orange claims major share of total agriculture. Traditional *jhum* cultivation, a very old mode of agriculture, involving slashing and burning of forests on slopes, is still in practice though at present it is not sufficient for food security. The produce of the *jhum* cultivation are mainly maize with millet as staple cereals along with little rice, arum and tapioca as staple tubers, and also ginger, turmeric and rai (mustard seeds) as cash crops. Cultivation of squash and strawberry have been started recently. All the respondents are mainly engaged in agriculture. Dependence on traditional *jhum* cultivation has been declined because presently people are found less involved and less informative about *jhum* cultivation as they have better alternative land use over this type of more laborious traditional cultivation with less return. Naturally, people find it more profitable to grow cash crops or to shift to plantation for its high return.

In Manas Biosphere Reserve area there are about 57 villages with 28,800 inhabitants, predominantly Bodo tribal people who live on the fringe of the Biosphere Reserve (Project Tiger, 2001). They come under the control of the District Revenue Authorities. Surrounding forests come under the Assam Forest Department. Agriculture is the mainstay of their economy. Land use for agricultural operation is an established practice. The timber and non-timber needs of the local population is met from the surrounding forest. In the post 2003 period after the formation of the Bodoland Territorial Council, the local population is actively participating in the conservation and development programme of Reserve. (Debonnet & Lethier, 2008).

Result and Discussion

As per NSS Report No. 538(66/1.0/1), December 2011, Monthly Per Capita Expenditure (MPCE) of Rural India is estimated as Rs. 1053.64 and Rs. 1984.46 in urban India. The poorest 10% of India's rural population has an average MPCE of Rs. 453. The poorest 10% of India's urban population has an average MPCE of Rs. 599.The median level of MPCE is Rs. 895 in rural India and Rs. 1502 in urban India.

Food is estimated to account for about 57% of the value of the average rural India's household consumption during 2009-10. This includes 14% for cereals and cereal substitutes, a little less than 8% for milk and milk products, and 8% for vegetables. On non-food item categories, fuel for cooking and lighting accounted for about 8%, clothing and footwear for 6%, medical expenses for a little over 5%, conveyance and education for about 3.5% each, other consumer services for 4% and consumer durables for 3.5%.

Average cereal consumption per person is 11.3 kg in rural India and 9.4 kg in urban India.

In rural India, average monthly per capita cereal consumption is around 10.2 kg for the poorest 10% of the population.

Table 3 : Average monthly Consumer expenditure (per capita) of studied village Darichikgre

Food Item	Rs. 623.65
Non-Food Item	Rs. 678.55
Total	Rs. 1302.20

As per this study average per capita expenditure per month in Darichickgre village is Rs.623.65 on food items and Rs.678.55 on non-food items and total per capita expenditure per month comes Rs.1302.20.

Comparison with all India estimate

The poorest 10 percent of India's rural population had MPCE of Rs.453. In case of our studied village, it is much higher e.g., Rs.1302.20. In rural India, the average MPCE estimated is Rs.1053.00.

Table 4 : Absolute and percentage break-up of MPCE by item group : Rural India and village Darichikgre

Item group	Monthly per capita expenditure (Rs.)		Percentage to total MPCE	
	Rural India	Village Darichikgre	Rural India	Village Darichikgre
Cereal	145	220.10	13.8	16.9
Pulses	35	34.46	3.3	2.6
Milk	81	20.80	7.7	1.6
Edible oil	39	40.00	3.7	3.1
Egg, fish, meat	50	134.00	4.7	10.3
Vegetables	86	63.90	8.2	4.9
Sugar, salt & spices	60	55.39	5.7	4.2
Other food	104	55.00	9.9	4.2
Food total	**600**	**623.65**	**57.0**	**47.8**
Pan, tobacco & intoxicants	31	63.03	2.9	4.8
Fuel & light	85	83.12	8.0	6.4
Clothing & footwear	65	102.00	6.2	7.8
Education	38	124.10	3.6	9.5
Medical	57	131.50	5.4	10.2
Conveyance	36	76.40	3.4	5.9
Misc. goods	44	45.90	4.2	3.5
Others	97	52.50	9.3	4.1
Non-food total	**453**	**678.55**	**43.0**	**52.2**
Total	**1053**	**1302.22**	**100**	**100**

Source: Field Survey

In the above table we have item wise monthly per capita expenditure calculated for the village under study and this has been compared with all India monthly per capita expenditure of rural areas for the same items.

This table depicts MPCE for the studied villages. MPCE includes expenditure by an individual both on food and non-food items. An analysis of the data as shown in the table-1 shows that average MPCE on food items in the said village is Rs. 623.65. It is higher than MPCE for rural India which is about Rs.600. It is higher by 3.79 percent compared to average MPCE in rural India.

An item wise break-up and descriptions of food items give a more detailed picture. In case of cereal, the average MPCE is Rs.145.00 while for the studied village it is Rs. 220.10. It means that there is a difference of Rs. 75.00 (34.12 percent). Similarly, the average MPCE for egg, fish and meat for the studied village is Rs.134.00 while for rural India it is only Rs.50.00. It means that on an average a person in the studied village spends about 62.69 percent more per month on the said items compared to rural India. But in case of milk and other food items, the average MPCE for rural India is closer to the studied village. In case of milk, the average MPCE for rural India is higher by 74.31 percent and for non-food items by 47.11 percent compared to the studied village.

An item wise break-up and descriptions of non-food items show interesting patterns of MPCE in case of few items. For the studied village, the average MPCE on betel leaf, areca nut, tobacco, and other intoxicants, clothing and foot wear, education, medical and conveyance is significantly very high compared to rural India. It is higher by more than 50 percent in case of areca nut, tobacco, and other intoxicants, education, and medical expenses (50.82, 69.38, 56.66, 52.88 and 36.27 percent) while for clothing and foot wear it is higher by 36.27 percent.

Similarly, the average MPCE on non-food items in the studied villages is Rs. 678.55 while the corresponding figure for rural India is much lower which is only Rs. 453.00. It means that the average MPCE in the village is higher by 23.24 percent compared to the average MPCE in rural India.

This gap in average MPCE with respect to rural India and the studied villages is also reflected when both food and non-food items are taken together. The average MPCE for the items (food and non-food) in case of rural India is Rs. 1053.00 while for studied villages it is Rs. 1302.22. It means that there is difference of 23.67 percent. This difference is mainly owing to higher MPCE on non-food items by the villagers.

Table 5: Percentage to total MPCE in the Village Darichikgre and Rural India

Item	Rural India (Percent)	Village Darichikgre (Percent)
Food	57	47.8
Non-food	43	52.2
Total	100	100

The percentage of total monthly per capita expenditure of Rural India and the village under study has been shown in the above table. It is evident from the above table that percentage of expenditure on food item is less in this village compared to all India average. And the percentage of expenditure on non-food item is much higher for this village which signifies better economic condition than average rural economy of India.

Table 6: Average cereal consumption per person per month

Rural India	11.3 kg
Village Darichikgre	10.9 kg

Average cereal consumption per person per month has been calculated to be 10.9 kg. for this village compared to Rural India average of 11.3 kg. Less cereal consumption also indicates better economic condition.

Table 7 : Deducting market value of home-grown /free collection items, MPCE of village Darichikgre and Rural India

Food item	Rs. 473.65
Non-food item	Rs. 632.75
Total	Rs. 1106.40

In our study we have calculated the amount of consumption of home-grown/free collection item and also calculated the market value of it. After deducting the market value of home-grown/free collection items from total expenditure it was found that it is clearly less than average all India MPCE. This indicates dependence on the available natural resources in case of Nokrek Biosphere Reserve.

Now we can discuss the results of the study of the Village Ultapani of Manas Biosphere Reserve.

Table 8 : Average monthly Consumer expenditure (per capita) of village Ultapani

Food Item	Rs. 561.74 (Assam- 646.38)
Non-Food Item	Rs. 617.71 (Assam- 356.91)
Total	Rs. 1179.45 (Assam – 1103.28)

Comparison with all India estimate

The poorest 10 percent of India's rural population had MPCE of Rs.453. In case of our studied village it is much higher e.g., Rs.1179.45. In rural India the average estimated MPCE is Rs.1053.

Table 9 : Absolute and percentage break-up of MPCE by item group: Rural India and Ultapani village

Item group	Monthly per capita exp. (Rs.)		Percentage to total MPCE	
	Rural India	Village Ultapani	Rural India	Village Ultapani
Cereal	145	179.37	13.8	15.2
Pulses	35	15.79	3.3	1.3
Milk	81	71.59	7.7	6.1
Edible oil	39	34.18	3.7	2.8
Egg, fish, meat	50	47.95	4.7	4.1
Vegetables	86	107.36	8.2	9.1
Sugar, salt & spices	60	52.50	5.7	4.5
Other food	104	53.00	9.9	4.5
Food total	**600**	**561.74**	**57.0**	**47.6**
Pan, tobacco & intoxicants	31	30.13	2.9	2.6
Fuel & light	85	65.26	8.0	5.5
Clothing & footwear	65	132.78	6.2	11.4
Education	38	169.61	3.6	14.5
Medical	57	45.97	5.4	3.9
Conveyance	36	45.79	3.4	3.9
Misc. goods	44	83.65	4.2	3.5
Others	97	44.52	9.3	7.1
Non-food total	**453**	**617.71**	**43.0**	**52.4**
Total	**1053**	**1179.45**	**100**	**100**

In the above table No.9 we have item wise monthly per capita expenditure calculated for the village under study and compared it with all India monthly per capita expenditure of the rural areas for the same items.

This table depicts MPCE for the studied village Ultapani. An analysis of the data as shown in the table-9 shows that average MPCE on food items in the said village is Rs. 561.74. It is little lower than MPCE for rural India which is about Rs.600.

An item wise break-up and descriptions of food items gives a more detailed picture. In case of cereal, the average MPCE is Rs.145.00 while for the studied village it is Rs. 179.37. It means that there is a difference of Rs. 34.37. In case of vegetables the average MPCE for rural India is 8.2 percent while for the studied village it is 9.1.

An item wise break-up and descriptions of non-food items show interesting patterns of MPCE in case of few items. For the studied village the average MPCE on clothing and foot wear and education is significantly very high compared to rural India. It is higher by almost 50 percent in case of clothing and footwear and for education it is more than 400 percent higher.

Similarly, the average MPCE on non-food items in the studied villages is Rs. 617.71while the corresponding figure for rural India is much lower, which is only Rs. 453.00. It means, the average MPCE in the village is much higher compared to average MPCE in rural India.

This gap in average MPCE with respect to rural India and the studied villages is also reflected when both food and non-food items are taken together. The average MPCE for the items (food and non-food) in case of rural India is Rs. 1053.00 while for studied villages it is Rs. 1179.45. This difference is mainly owing to higher MPCE on non-food items by the villagers.

Table 10: Percentage to total MPCE of village Ultapani and Rural India

Item	Rural India (Percent)	Village Ultapani (Percent)
Food	57	47.6
Non-food	43	52.4
Total	100	100

The percentage of total monthly per capita expenditure of Rural India and the village under study has been shown in the above table. It is evident from the above table that the percentage of expenditure on food item is less in this village compared to all India average. And expenditure percentage on non-food item is much higher for this village which signifies better economic condition than average rural economy of India.

Table 11 : Average cereal consumption per person per month in Ultapani and Rural India

Rural India	11.3 kg
Village Ultapani	12.07 kg (Assam- 12.9 kg)

Average cereal consumption per person per month has been calculated to be 12.07 kg. for this village compared to Rural India average of 11.3 kg.

Table 12 : Deducting market value of Home grown / Free collection items, MPCE in the Village and Rural India

Food item	250.19
Non-food item	563.50
Total	813.69

In our study we have calculated the amount of consumption of home-grown/free collection item and also calculated the market value of it. After deducting market value of home-grown/free collection item from total expenditure it is found to be clearly less than average all India MPCE indicating dependence on the available natural resources in both cases of Biosphere Reserve.

Concluding Remarks

In brief, it can be deduced that both the studied villages are handicapped with low and insufficient amenities including health services mainly due to their geographical isolation. For availing modern treatment facilities, villagers have to move to the district town i.e., Tura or Kokrajhar and naturally have to bear higher cost of treatment and conveyance which has been reflected in their total expenditure on medical treatment, clothing & footwear and for education. Considering monetary income only, villagers are generally poor and therefore men, women and children have to jointly eke out their living in a very difficult circumstance. Villagers still depend mainly on subsistence agriculture and economic diversification that has been insignificant other than a minor source of income from plantation- agricultural surplus. It is also observed that villagers still have a very close association with the forest. They go to the forest for a variety of reasons such as collection of food, games and medicinal plants. The elaborate and complicated nature of land ownership as per the Garo customary laws also reflects, to some extent, their dependence on land. A very high level of dependence on forest is quite evident from the figures which came out from the calculation of market value of free collection and home grown items of consumption. Interestingly if the value of those collections are deducted, their MPCE goes below the level of poorer section of the rural India.

The once viable shifting or *jhum* cultivation with 30-40 years of cycle has now become a serious environmental issue due to lower cycle of 4-6 years or even less. It is observed worldwide that degraded or fragmented forests encourage mosquito breeding than a good healthy forest. Hence changing over to settled or plantation agriculture in those degraded hill forest is exposing those people to the malaria vector with longer exposures as the man-days spend in the present day agricultural fields are several times more than that under primitive *jhum* cultivation.

Finally, the higher share of expenditure on non-food items (52.2 and 52.4 percent) among the villagers of such an interior forest settlement under subsistence economy seems related highly to the health expenditure caused by higher disease burden and expenditure on clothing etc. & education. Moreover, the seasonal impact on non-food expenditure due to festivity i.e., the Christmas and English New Year due to Christian influence among the Garo tribesmen and Bhogali Bihu in case of the village Ultapani cannot be ruled out. Though these two Biosphere Reserves are situated in different geographical set up being one in plateau and the other in foot hills, it is evident from the results regarding pattern of consumer expenditure that both the villages are comparatively well off than average rural India.

The main limitation of the study remains that it has been done only in one season. It is evident that market price was observed on the higher side than in main land in this particular period of survey. Therefore, a further investigation of MPCE in other seasons, particularly in the lean period, is needed to assess the seasonal variations. But dependence on natural resources is clearly evident. It is assumed that the quality of life may be reflected in the MPCE on non-food items, which is clearly higher than the MPCE on food items.

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