



## FACTORS AFFECTING ON UPLIFTING OF THE STANDARD OF LIVING: A CASE STUDY OF TWO VILLAGES IN DIBRUGARH DISTRICT, ASSAM.

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### Abstract

This present study is a modest attempt to develop awareness and insight to socio economic study of the various social, cultural and economic aspects of the population residing in the two villages. The report contains the analytical study of socio-economic factors with practical approach. The information obtained were analyzed and interpreted.

**Key Words:** Statistics, Standard of Living, Odds Ratio, P-Value.

### 1. Introduction

The standard of living is the level of wealth, comfort, material goods and necessities available to a certain socio-economic class, in a certain geographic area. The standard of living includes factors such as income, quality and availability of employment, class disparity, poverty rate, quality and affordability of housing, hours of work required to purchase necessities, gross domestic product, inflation rate, number of vacation days per year, affordable (or free) access to quality healthcare, quality and availability of education, life expectancy, incidence of disease, cost of goods and services, infrastructure, national economic growth, economic and political stability, political and religious freedom, environmental quality, climate and safety. The standard of living is closely related to quality of life.

### 2. Objectives of the study

1. To see the pattern of housing condition, sanitary condition, source of lighting etc of the two villages.
2. To see the effect of different demographic factors on standard of living.

### 3. Description of the two villages

#### 3.1. Puharikhania Gaon

This village is near to the Dibrugarh University (Assam). It is under Barbaruah Development Block. The village is situated about 5 km away from Dibrugarh town. Puharikhania Gaon is under Rajabhata Gaon Panchayat. There are about 200 households and about 1200 populations in this village. The villagers belong to SC community. To the west of the village, there is Dighola Aithan (a temple). The river Brahmaputra is nearby the village and it is on the south side of the village. In the east side it is surrounded by 37 National Highway and in the north side of the village, there is a P.W.D. drainage system.

The transport or communication system of the village is overall good. For health practices there is a sub-centre and for major disease they go to the Assam Medical College. Electricity facility is available in the village but it is not covered by the whole area of the village.

The occupations of the villagers are viz., service (Govt. or Private), business, cultivation and daily wage. The researcher has found that most of the household belongs to the middle class.

People in this village are not all literate, few of them are illiterate. Thus in this village most of the villagers are literate but not highly qualified on an average. There is only one L.P. school and one M.E., but not granted yet by the government. The major source of drinking water for this village is tube well.

#### 3.2. Hatkota Konwar Gaon

The village is situated about 2 km away from Dibrugarh University and about 6 km away from the Dibrugarh Town. There are 120 households and about 550 populations in this village. The villagers belong to OBC community and they belong to Ahom sub-community. The religion of the villagers is Hindu and all the villagers have faith in their religion, which is symbolized by the two "Namghars" situated in the village. The transport or communication system of the village is good. The east side of the village is bounded by Rani Gaon and 37 National Highway; it is about 1km from the village. In north side of the village, there is P.W.D. drainage system. In the west and south side of the village, there are two villages viz., Nawgaon and Komar Gaon respectively. The occupations of the villagers are viz., service (Govt. or Private), business, cultivation and daily wage. The researcher has found that most of the household belongs to the middle class. For health practices there is a sub-centre and for major disease they go to the Assam Medical College and some of them go to the



Nursing Homes which are situated in the Dibrugarh Town. The researcher has found that the village is covered with electric line. People in this village are not all literate. Few of them are illiterate. There is an L.P. school and an Anganbadi school in the village. The major source of drinking water for this village is tube well.

#### 4. Research Methodologies

To meet the above objectives, simple statistical tools like frequencies, percentages of family type, education and caste have been calculated. The diagram is used to show the pictorial view of housing condition, sanitary system, source of light etc. In order to study the standard of living, the odds ratios have been calculated.

#### 5. Odds Ratio

The odds ratio is a way of comparing whether the probability of a certain event is the same for two groups. An odds ratio of one implies that the event is equally likely in both groups. An odds ratio greater than one imply that the event is more likely in the first group. An odds ratio less than one imply that the event is less likely in the first group.

A Typical 2 By 2 Table

	$X^-$	$X^+$	
$Y^-$	a	b	$a + b$
$Y^+$	c	d	$c + d$
	$a + c$	$b + d$	$n = a + b + c + d$

The odds ratio (OR) is simply the ratio of the two odds and is given by

$$OR = \frac{a/b}{c/d}$$

#### 5. Construction of Questionnaire

For collecting information the instrument or questionnaire developed by Krishna Mohan P.V.T et. al. [1] was used after making slight modification in the ownership of livestock and goods category and in the score. The questionnaire is attached last page for the purpose of reference.

#### 6. Limitations of the study

In a survey, the collection of necessary data is a difficult job. The foremost problem that we faced there is not trust upon us at all first. People feared to supply the adequate data due to unseen faces and fearing to government officials. Also the people refused or failed to give us enough facts and events due to lack of education/knowledge. Some people refused to co-operate with us, we have to offer them enough reason behind our purpose. Endless arguments pursued, such as some of the villagers asked about the benefits of our research work to them .Illiterate people asked us whether they would get any job supply us information.

There is also communication problem faced during our survey process, though the collection of data was tedious one but we found it interesting and tried to complete at the best we could.

#### 7. Analysis of Data and Results

Data were analyzed using SPSS version 17. Frequencies for categorical variables are reported. The significance level adopted was p 0.05.

##### 7.1. The types of house of the two villages

From the figure 1, it is observed that the number of pucca houses in Hatkota Konwar gaon (70.6%) is more than the Puharikhanian gaon (38.8%). Accordingly the number of kuccha houses in Puharikhanian gaon (49.2%) is very much higher than that of Hatkota Konwar gaon (11.7%).

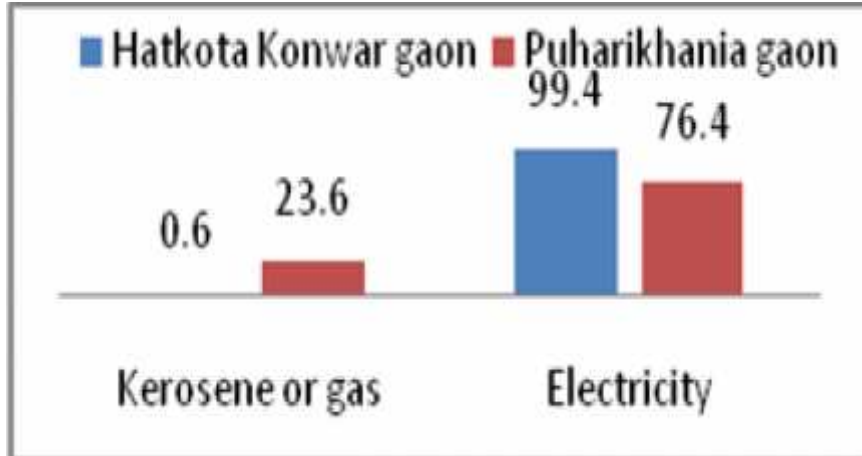


Figure 1: Type of houses (in %)

### 7.2. Different Sources of Lighting of the Two Villages

Figure 2 shows that the maximum number of households in Puharikhania gaon use either kerosene or gas for lighting their houses. And 99.4% households have electricity in Hatkota Konwar gaon whereas 76.4% households in Puharikhania gaon have electricity.

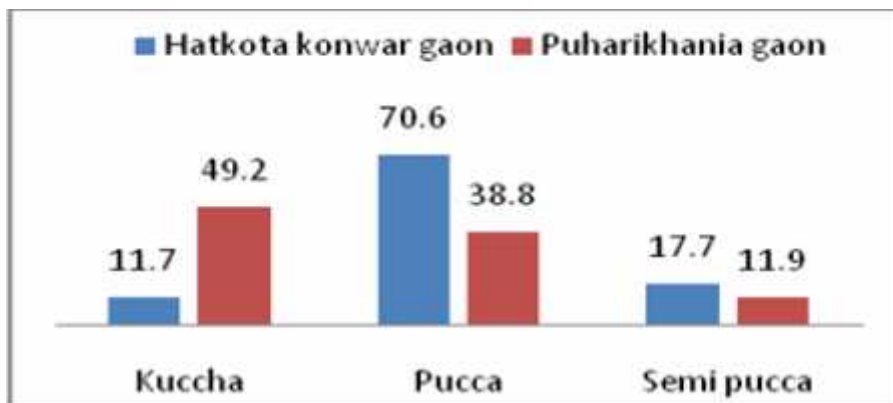


Figure 2: Sources of lighting (in %)

### 7.3. Different Types of Toilet Facilities for the Two Villages

From the figure 2, it is seen that own flush toilets of both the villages are nearly equal (99.4% and 76.9%). But in Hatkota Konwar gaon they do not have own pit toilets whereas 100% of the households of Puharikhania gaon have their own pit toilets.

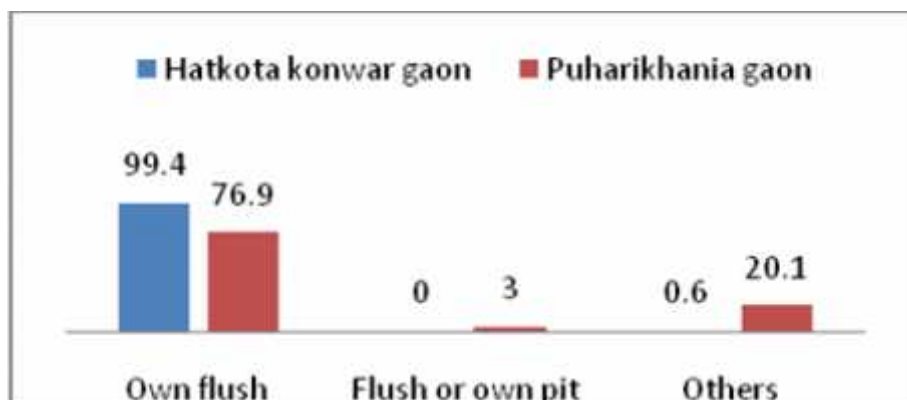


Figure 3: Toilet Facilities (in %)



#### 7.4. Source of Water of the Two Villages

From Table 3.4 it is observed that 46.7% of households in Hatkota Konwar gaon have either well or pipe for drinking water whereas 52.4% of households in Puharikhanian gaon have either well or pipe.

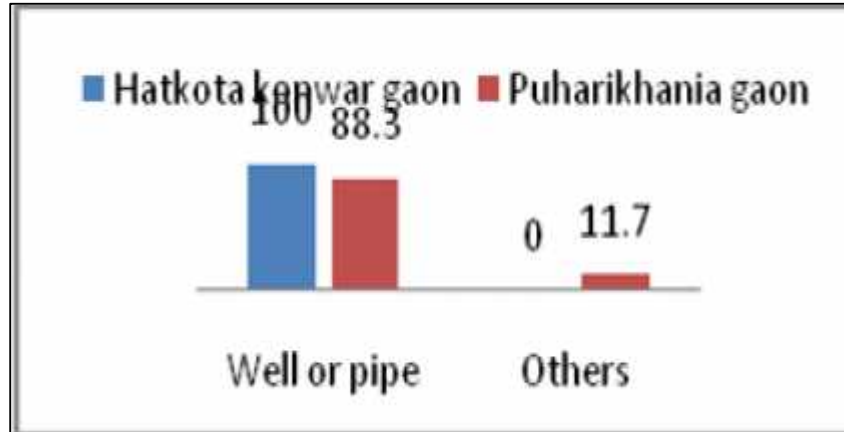


Figure 4: Sources of drinking water (in %)

#### 7.5. Effect of Different Demographic Factors on Standard Of Living

Table 1: Comparison of Standard Of Living Hatkota Konwar Gaon

Characteristics	Low Standard of Living	Middle and High Standard of Living	p-value	Odd ratio	Confidence Interval (95%)	
					lower	Upper
Family type						
Joint (Ref)	18.5%	31.9%	-	-	-	-
Nuclear	81.5%	68.1%	0.160	2.061	0.751	5.655

From table 1 it is observed that 31.9% joint family living in middle and high standard of living whereas 18.5% family are in low standard of living. Similarly 68.1% nuclear family living in middle and high standard of living, accordingly 81.5% family are in low standard of living. The OR = 2.061 shows that the standard of living is almost two times better for nuclear family than joint family.

Though there is a difference between these two types of family with respect to their standard of living, but the difference is found to be insignificant (since p-value is greater than 0.05).

This is supported by the interval estimate of OR also. As from the table 1 interval estimate of OR is (0.751, 5.655) which includes OR =1.

Table 2: Comparison of Standard of Living Puharikhanian Gaon

Characteristics	Standard of Living		p-value	Odd ratio	Confidence Interval (95%)	
	Low	High			lower	Upper
Family type						
Joint (Ref)	45.7%	38.5%	-	-	-	-
Nuclear	54.3%	61.5%	0.234	1.349	0.824	2.208

From table 2 it is observed that 38.5% of the joint families live in middle and high standard of living and 45.7% families are in low standard of living. Similarly there are 61.5% nuclear families in middle and high standard of living category whereas 54.3% family is in low standard of living category. The OR =1.349, it means that the standard of living is 1.349 times better than the joint family.

There is a difference between this two family groups with respect to their standard of living but the difference is found to be insignificant because p-value is greater than 0.05.



This is supported by the interval estimate of OR. As from the table 2 interval estimate of OR is (0.824, 2.208) which includes OR=1.

**Table 3: Comparison of Standard of Living of Hatkata Konwar Gaon W.R.T. Education**

Characteristics Education	Standard of Living		p-value	Odd ratio	C.I. (95%)	
	Low	High			Lower	Upper
Illiterate (Ref.)	8.6%	1.8%	-	-	-	-
Primary	25.7%	23.8%	0.079	4.4	0.844	23.121
Up to secondary	42.9%	44.4%	0.049	5.0	1.007	24.332
Up to College and above	22.9%	30.0%	0.031	6.3	1.186	33.262

From Table 3, it is observed that 8.6% illiterate people are living in low standard of living and only 1.8% in middle and high standard of living. It is also observed that in case of primary education level, 25.7% people in Hatkota Konwar Gaon are living in low standard of living and 23.8% in High and Middle Standard of living. Similarly, in case of people for up to Secondary education, 42.8% lie in low standard of living and 44.4% stay in high and middle standard of living. Accordingly, for college and above, 22.9% people are in low standard of level category and 30% in high standard of living. Due to low percentage of illiterate people in high standard of living, we have taken illiterate category as reference category for calculating odd ratio. The odd ratio for primary level taking illiterate as reference category is 4.4. It means that the standard of living is 4.4 times better than the illiterate people but due to  $p\text{-value} > 0.05$ , it is not statistically significant. Also, 95% confidence interval also reveals the same fact. Similarly, estimated odd ratio for secondary education is 5.0 which mean that standard of living is 5 times better than the illiterate people also it is statistically significant. Next, for college and above category, estimated odd ratio is 6.3 which reflect that standard of living of high educated person is better than the illiterate people and it is statistically significant since  $p\text{-value} < 0.05$ . In Table 3, we clearly see that standard of living of person increases with their education level.

**Table 4: Comparison of Standard Of Living of Puharikhania Gaon W.R.T. Education**

Characteristics Education	Standard of Living		p-value	Odd ratio	C.I. (95%)	
	Low	High			Lower	Upper
Illiterate (Ref.)	10.6%	8.2%	-	-	-	-
Primary	39.4%	46.6%	0.328	1.542	0.647	3.674
Up to secondary	45.7%	39.4%	0.794	1.122	0.473	2.661
Up to College and above	4.3%	5.8%	0.418	1.765	0.446	6.979

From Table 4, it is observed that 10.6% illiterate people are living in low standard of living and only 8.2% in middle and high standard of living. It is also observed that in case of primary education level, 39.4% people in Hatkota Konwar Gaon are living in low standard of living and 46.6% in High and Middle Standard of living. Similarly, in case of people for up to Secondary education, 45.7% lie in low standard of living and 39.4% stay in high and middle standard of living. Accordingly, for college and above, 4.3% people are in low standard of level category and 5.8% in high standard of living. Due to low percentage of illiterate people in high standard of living, we have taken illiterate category as reference category for calculating odd ratio. The odd ratio for primary level taking illiterate as reference category is 1.542. It means that the standard of living is 1.542 times better than the illiterate people but due to  $p\text{-value} > 0.05$ , it is not statistically significant. Also, 95% confidence interval also reveals the same fact. Similarly, estimated odd ratio for secondary education is 1.122 which means that standard of living is 1.122 times better than the illiterate people although it is not statistically significant. Next, for college and above category, estimated odd ratio is 1.765 which reflects that standard of living of high educated person is better than the illiterate people but it is not statistically significant since  $p\text{-value} > 0.05$ . In Table 4, we clearly see that standard of living of person increases with their education level.



**Table 5: Comparison of Standard Of Living With Respect To Caste**

Characteristics Caste	Standard of Living		p-value	Odd ratio	C.I. (95%)	
	Low	High			Lower	Upper
SC(Ref)	72.9%	48.3%	-	-	-	-
OBC	27.1%	51.7%	0.001	2.879	1.870	4.434

From Table 5 it is observed that the odds ratio is 2.879, which shows that the standard of living of OBC community is more than two times better than the SC community.

There is a difference between these two family groups with respect to their standard of living, also the difference is found to be significant since p-value is less than  $\alpha$ , where  $\alpha = 0.05$ .

### 8. Conclusions and suggestions

1. Pucca house in Hatkota Konwar Gaon is more than in Puharikhanian Gaon. Similarly the number of kuccha houses in Puharikhanian Gaon is more than Hatkota gaon, i.e. housing condition of Hatkota Konwar Gaon is better than Puharikhanian Gaon.
2. Though the electricity supplies are available in both the villages but still some houses have not taken electric connection. In Hatkota Konwar Gaon 0.6 %, on the other hand in Puharikhanian gaon 23.6% households still have not any electric connection. The reasons might be due to economic condition of the families. We can say that electricity condition of Puharikhanian gaon is poor than the Hatkota Konwar gaon. We know that electricity is essential commodity for daily life and it has great impact on standard of living. So, we should do some work towards this direction to uplift standard of living of people of Puharikhanian Gaon.
3. Observing the sanitary condition of the villages, it is observed that in Hatkota Konwar gaon, 99.4% households use their own flush toilets and 0.6% do not have toilets. On the other hand, 76.9% households in Puharikhanian gaon have own flush toilets whereas 3% households use pit toilets and 20.1% households do not have toilets. So, Hatkota gaon is far better than Puharikhanian in this direction.
4. About the sources of drinking water of both the villages, we have seen that in Hatkota Konwar gaon 100% households have drinking facility from well or pipe. In case of Puharikhanian gaon, it is observed that, 88.3% households have drinking facility from well or pipe, 11.7% households drink water from other sources.
5. From the observed odds ratio, the standard of living of nuclear families in Hatkota Konwar gaon and Puharikhanian gaon is better than joint families. The reason may be that in nuclear families, it is common to have dual incomes. Both parents work to provide financial stability for the household, creating a larger cash flow to supply the basic family needs of housing, food and healthcare. Financial stability also allows the parents to provide additional extracurricular opportunities for their children, such as music or athletic lessons. These opportunities allow children to flourish socially and develop and maintain their standard of living.
6. Education is one of the most significant and permanent priorities for developing standard of living. It is observed that for education, the standard of living in Hatkota Konwar gaon increases when the level of education increases. Similarly the standard of living in Hatkota Konwar gaon increases with the increase in level of education. But if we compare the standard of living of both the villages with education levels, we observe that the standard of living in case of Hatkota Konwar gaon is better than Puharikhanian gaon because the number of literate people in each category (primary, up to secondary, up to college and above) in Hatkota Konwar gaon is more than Puharikhanian gaon.
7. It is observed from the analysis part that 51.7% OBC community are in middle and high standard of living, whereas 48.3% SC community live in the middle and high standard of living category. So, we can say that the standard of living of OBC community is better than its SC counterpart.

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