

"Educational Attainment and Rural Poverty in Barpeta District, Assam: An Empirical Investigation"

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ABSTRACT

Education plays an important role in reducing poverty and improving living standards. However, empirical evidence on the relationship between education and poverty at the district level is limited in rural Assam. This study examines the relationship between educational attainment and rural poverty in Barpeta district, Assam. The study has two objectives: (i) to assess the poverty status of rural households and (ii) to analyse the relationship between education and poverty. Primary data were collected from 400 households in eight villages of four development blocks using a multistage random sampling method. Secondary data were collected from government reports and published studies. The Head Count Ratio, Poverty Gap Ratio, Severity of Poverty Index, and Multidimensional Poverty Index were used to measure poverty. Descriptive statistics, correlation, regression, and ANOVA were used for data analysis. The findings show that 40.58% of the surveyed households live below the poverty line. Most poor households have earning members with no formal education or only primary education. Regression and ANOVA results show a significant positive relationship ($p < 0.05$) between educational attainment and household income. Landlessness, frequent floods, and limited livelihood opportunities also increase rural poverty. The study concludes that improving access to education, skill development, and employment opportunities can help reduce rural poverty and support sustainable development in Assam.

Key words: Educational Attainment, Rural Poverty, Barpeta District, Multidimensional, Poverty Index (MPI), Poverty Reduction.

INTRODUCTION

Education is widely acknowledged as a fundamental driver of human development, economic growth, and poverty reduction. It enhances knowledge, skills, productivity, and employment opportunities, thereby improving household income and overall living standards. Conversely, poverty restricts access to quality education by limiting families' ability to afford schooling, resulting in a persistent cycle of deprivation. Human capital theory states that education, training, and health are investments that directly increase an individual's productivity and future earnings. Pioneered by economists like Gary Becker and Theodore Schultz, the concept treats human attributes as a form of capital comparable to physical machinery. Similarly, the capability approach by Amartya Sen evaluates human well-being, poverty, and justice by focusing on functioning i.e. what a person can do or be and capabilities i.e. their real freedom to choose those outcomes, rather than just income or utility. On the other hand, Social exclusion theory explains how individuals or groups are systematically blocked from full participation in normal economic, social, and political life. Here key dimensions include material deprivation, lack of normative integration, and limited civic participation, which are most of the time happens because of lack of education and consequently leads to poverty. This bidirectional relationship between education and poverty is particularly evident in rural and economically disadvantaged regions, where inadequate educational attainment constrains livelihood opportunities and perpetuates intergenerational poverty.

India has made significant progress in reducing poverty and improving educational outcomes over the past decade. According to NITI Aayog, India's multidimensional poverty declined from 24.85% in 2015–16 to 14.96% in 2019–21, with approximately 24.8 crore people escaping multidimensional poverty between 2013–14 and 2022–23. Similarly, Assam recorded a substantial decline in multidimensional poverty from 36.97% in 2013–14 to 14.47%, reflecting improvements in access to education, healthcare, sanitation, housing, and other basic services. Despite these achievements, rural poverty remains concentrated in several districts where educational deprivation, inadequate livelihood opportunities, and weak socio-economic infrastructure continue to hinder inclusive development.

Barpeta district represents one such region. Identified as one of the country's backward districts under the Backward Regions Grant Fund (BRGF), it continues to experience high levels of poverty, recurrent floods, insecure livelihoods, and limited access to quality education. According to the Economic Survey of Assam (2022–23), nearly 39% of the district's population lives below the poverty line. Frequent flooding, dependence on low-paid informal occupations, landlessness, and inadequate educational opportunities have further reinforced the cycle of poverty. The present study focuses on four development blocks of Barpeta district i.e. Gomaphulbari, Rupshi, Chenga, and Mandia, which are among the most socio-economically vulnerable areas of the district.

Although existing studies consistently identify education as an effective instrument for poverty reduction, empirical evidence at the district level remains limited, particularly in flood-prone rural areas of Assam. Understanding the relationship between educational attainment and household poverty is essential for designing targeted interventions that promote inclusive and sustainable development. Against this backdrop, the present study empirically examines the relationship between educational attainment and rural poverty in Barpeta district using primary household-level data. The findings are expected to contribute to the formulation of evidence-based policies aimed at improving educational opportunities, strengthening rural livelihoods, and accelerating progress towards the Sustainable Development Goals, particularly SDG 1 (No Poverty) and SDG 4 (Quality Education).

LITERATURE REVIEW

Poverty is widely recognized as a major impediment to balanced socio-economic development and remains a central concern of global development policy. The introduction of the Human Development Index by the United Nations Development Programme in 1990 marked a shift from purely income-based assessments of welfare toward a broader understanding incorporating health and education. The Human Poverty Index, introduced in 1997 and later replaced by the Multidimensional Poverty Index in 2010, further emphasized deprivation in life expectancy, education, and living standards, thereby reinforcing the multidimensional nature of poverty (UNDP, 1990; Alkire et al., 2015).

Ann and Ilektra (2009) argued that poverty, education, and social inclusion are deeply interconnected and that meaningful poverty reduction requires a holistic approach encompassing health, gender equality, and debt relief. Using data from the 2001 Cameroonian Household Survey, Njong (2010) demonstrated that higher educational attainment and work experience significantly reduce the probability of being poor, although the poverty-reducing effect of education was found to be stronger for men than for women.

Awan et al. (2011) established a strong negative relationship between education and poverty in Pakistan, emphasizing that education enhances skills, productivity, and earning opportunities. Similarly, Afzal et al. (2012) showed that investment in education contributes to economic growth and long-term poverty reduction by improving both individual and societal welfare.

Scholars increasingly recognized poverty as a multidimensional phenomenon encompassing monetary deprivation, social exclusion, and capability deprivation (Bellani&D'Ambrosio, 2014; Kwadzo, 2015; Maggino, 2015). Mihai et al. (2015) highlighted the vicious cycle in which poverty compels children to enter the labor force instead of attending school, thereby perpetuating deprivation across generations. Parziale and Scotti (2016) further observed that educational advancement not only promotes economic prosperity but also reduces social exclusion and income inequality.

The persistence of inequality within and among countries has remained a major concern, prompting its inclusion, alongside climate action and poverty eradication, among the Sustainable Development Goals adopted in 2015 (Fund, 2015; Alvaredo et al., 2017). Parveen and Qounsar (2018) identified inadequate infrastructure, a shortage of trained teachers, and unfavourable social attitudes as key barriers to inclusive education. Neupane (2019) found that poverty and gender norms in Nepal limit girls' access to schooling, particularly in underdeveloped regions. Walker et al. (2019) emphasized that improving both access to and the quality of education is essential for reducing economic and gender disparities.

Recent studies continue to affirm the crucial role of education in poverty reduction. Rose et al. (2021) noted persistent urban–rural disparities in access to inclusive education for children with disabilities in Telangana, despite policy initiatives. Liu et al. (2021) pointed out the limited empirical evidence on the precise mechanisms through which education influences income inequality. Suprabha and Drisya (2022) documented the educational and economic disadvantages faced by tribal communities in Kerala, attributing low literacy rates primarily to poverty and parental illiteracy.

Serneels and Dercon (2020) examined the relationship between education, aspirations, and poverty in rural India. They found that low educational attainment and limited educational aspirations contribute to persistent poverty across generations. The study emphasized that improving access to quality education can enhance future income and social mobility.

Grover (2022) analysed educational inequality in India and reported that children from poor households, Scheduled Castes, Scheduled Tribes, and rural areas continue to face limited access to quality education. These inequalities reduce employment opportunities and increase the risk of poverty.

Saluja (2023) reviewed India's education policies and found that educational inequality persists despite policy reforms. The study argued that unequal access to quality education among disadvantaged groups limits economic opportunities and contributes to poverty, highlighting the need for effective policy implementation.

Maity (2023) examined the relationship between poverty and girls' education across Indian states. The study showed that poverty discourages girls from completing higher secondary education, while low educational attainment restricts employment and income. Strengthening girls' education was identified as an important strategy for poverty reduction.

Diwakar (2023) found that poverty and conflict reduce school attendance and learning outcomes in vulnerable regions of India. The study concluded that poor educational achievement lowers future earning capacity and increases the risk of long-term poverty.

Sutradhar (2022) analysed multidimensional poverty in the eight North-Eastern states using secondary data. Education was found to be one of the strongest determinants of poverty reduction in the study. Higher literacy and educational attainment resulted in lower multidimensional poverty in the states. The author concluded that, for sustainable poverty eradication in North-East India improving access to education and skill development is a prerequisite.

Shullai & Panda (2024), examined the relationship between household characteristics and learning poverty in Meghalaya. Findings revealed that learning poverty was significantly higher among children of low-income families and children of parents with low levels of education. The study showed that the parents' education was the most important factor in determining future income and reducing poverty.

Sarma & Sarma, (2025). explored the issue of education inequality in Assam and revealed that students in the rural areas are at a disadvantage due to poor digital infrastructure, language barriers and the absence of adequate educational support from their parents. Such educational disadvantages hinder human capital development and trap marginalized groups in poverty.

UDISE+ Report on Assam (2025). The report reflected an improvement in school retention and also reduced dropout rates in Assam but accordingly found severe infrastructure deficits in rural schools. Limited

educational facilities continue to affect disadvantaged households, reducing opportunities for higher education and better employment, therefore contributing to intergenerational poverty.

. Hussain (2026) explored that, women's educational attainment in Hojai district is significantly influenced by poverty, parental education, early marriage, and school accessibility. It concluded that low educational attainment among women limits employment opportunities and reinforces household poverty.

Afrin & Barbhuyan (2026). studied and examined that low parental income, poor educational background, and socioeconomic deprivation significantly increase secondary school dropout. School discontinuation reduces skill acquisition and employability, thereby increasing the likelihood of persistent poverty among rural households.

Suri & Karmakar (2026). Educational Challenges and Learning Inequalities among Tea Tribe Students in Assam. Reviewing literature and official statistics, the authors reported that Tea Tribe communities continue to suffer from poor educational outcomes because of poverty, social exclusion, and inadequate educational infrastructure.

Government of India- Investment in North-East Education (2025): Recent government initiatives have increased investment in educational infrastructure across North-East India, recognizing education as a major instrument for poverty reduction and regional development. Expansion of higher education institutions is expected to improve human capital formation and reduce socioeconomic inequalities.

Times of India (2026). Assam Schools Face Teacher Shortage and Declining Enrolment. The report highlighted severe teacher shortages and declining student enrolment in Assam. Weak educational infrastructure particularly affects rural and economically disadvantaged communities, reducing educational quality and limiting opportunities for escaping poverty through human capital development.

Latest data on Assam's education and employment divide (2026): Recent discussions on education in Assam reveal that although educational attainment has improved, many students still lack employable skills. The poorly educated rural youth remain vulnerable to unemployment and poor paying jobs, perpetuating the vicious cycle of poverty.

Overall, the literature consistently demonstrates that education is a fundamental instrument for alleviating poverty and reducing inequality. Nevertheless, further empirical research is needed to examine the combined effects of educational, social, and economic factors on multidimensional poverty.

RESEARCH GAP

Although recent studies consistently reflecting that low educational attainment is associated with poverty in Assam and North-East India, most research relies on secondary data, focuses on school education or multidimensional poverty, or examines specific groups such as women or Tea Tribes. There is limited empirical research using household-level primary data to quantify how educational attainment influences household income, expenditure, and poverty status in rural Assam. Moreover, few studies integrate statistical techniques such as regression, ANOVA, and chi-square tests to establish the causal relationship between education and poverty, leaving an important gap for district-level studies such as Barpeta.

OBJECTIVE OF THE STUDY

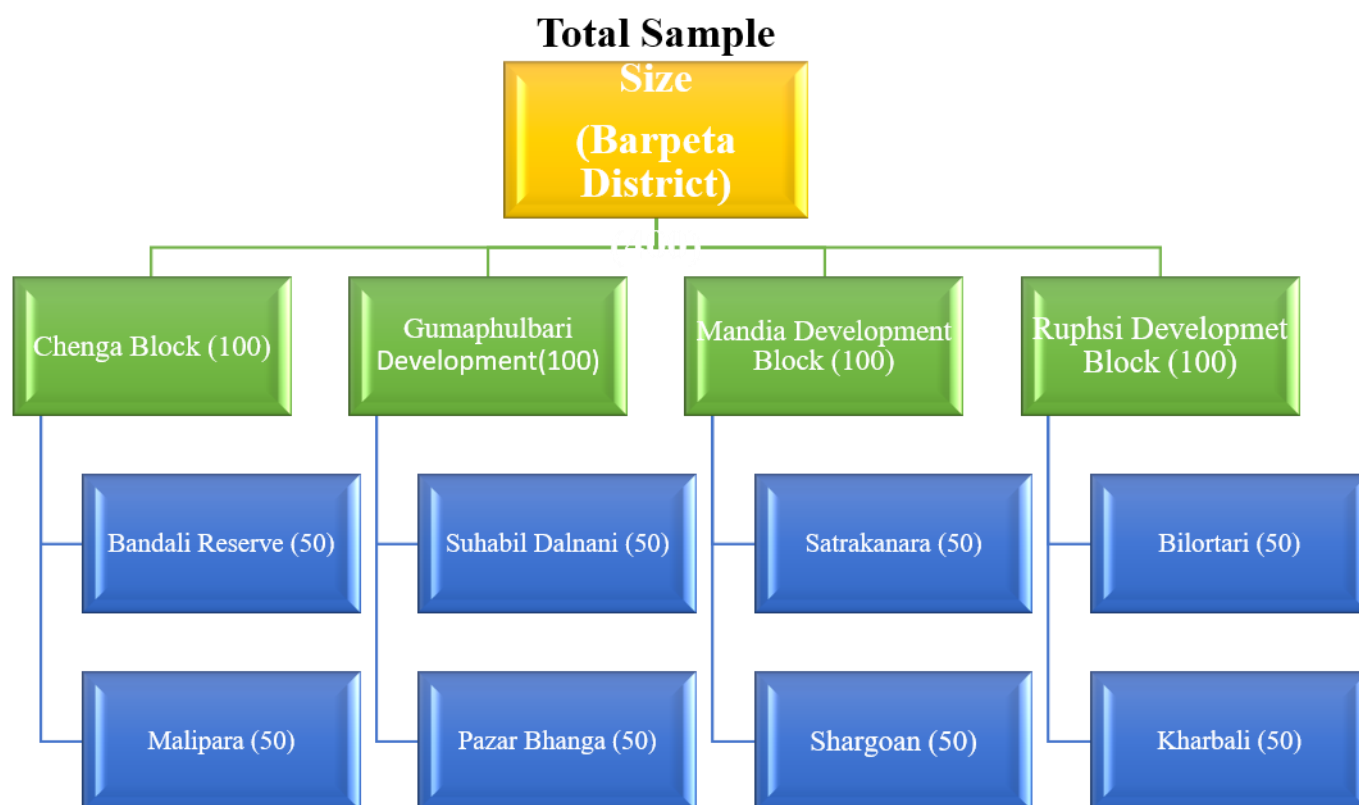
To address the research, gap the following objectives have been formulated

- (i) To assess the poverty status of the respondents in the study area
- (ii) To analyze the interrelationship between poverty and education among the respondents in the study area.

METHODOLOGY

Study area

Barpeta district is the 6th poorest district of Assam as per the Economic Survey of Assam 2025-26. In 2006 the government India recognized Barpeta as one of the country's 250 most backward districts (out of a total of 640.) It is one of the eleven districts in Assam currently receiving funds from the Backward Regions Grant Fund Program (BRGF.)



(Source: <https://barpeta.assam.gov.in/about-us/district-data>, 2020-21)

Out of 9 Development Blocks in the District only 4 blocks accounting approximately 45% of the total blocks have been selected purposively considering the following factors,

1. All sample blocks are composite of 100% rural areas
2. Again these blocks are also exposed to perennial floods and land erosions, as these blocks are excessively to the mighty river Brahmaputra and the river Beki.
3. Population of all four blocks are having majority of religious minority.
4. All the poverty eradication program mainly MGNREGA, PMAY (G), ANTYODAYA ANNA YOJANA are fully implemented in the said blocks (as reported by the RD authorities of the district)

Following are the four selected Development Blocks,

i) Gomaphulbari Development. ii) Rupshi Development Block iii) Chenga Development Block. iv) Mandia Development block

Sampling Design for Primary Data Collection

Cochran's formula, $n_0 = \frac{z^2 p (1-p)}{e^2}$ is used to calculate an ideal sample size for a survey when dealing with a large or infinite population. It provides a statistically significant minimum number of participants to ensure reliable results with a desired confidence level and margin of error.

For data collection Multi Stage Random sampling has been used. The sample size of the study estimated to be 384 taking 95% confidence levels and 5% margin of error with critical value ($Z_{0.05}$). At 95% confidence level critical value $Z_c = 1.96$.

$$\text{Margin error, } Z_{0.05} \times \sqrt{P(1-P)} / n_0 = 0.05$$

$$\Rightarrow 1.96 \times \sqrt{0.50 \times (1-0.50)} / n_0 = 0.05$$

$$\Rightarrow 1.96 \times \sqrt{0.50 \times .50} / n_0 = 0.05$$

$$\Rightarrow 0.50 \sqrt{n_0} = 0.05 / 1.96$$

$$\Rightarrow 0.50 \sqrt{n_0} = 0.0255$$

$$\Rightarrow 0.50 / 0.0255 = \sqrt{n_0}$$

$$\Rightarrow 19.6078 = \sqrt{n_0}$$

$$\Rightarrow (19.6078)^2 = n_0$$

$$\Rightarrow 384.47 = n_0$$

$$\therefore n_0 \approx 384$$

For simplification of the analysis the sample size is taken as a round figure of 400 households.

The following table-1 shows the population and number of households in four Development Blocks as per 2011 Census

Table-1 (Block wise Population, 2011 Census)

Blocks	Population	Male	Female	Households
Ruposhi	163,765	84,549	79,216	31,249
Mandia	349,328	179,275	170,053	65,511
Chenga	112,500	57,643	54,857	22,294
Gomaphulbari	81,078	41,658	39,420	16,358
Total	706,671	363,125	343,546	135,412

Though the number of households in Mandia Development Block was comparatively higher as per 2011 census, but presently it has reduced because of large scale land erosion and households were shifted to another places. That is why the sample size has taken equally (50 households) for each Development Block.

Data were analysed using descriptive statistics, correlation and regression analysis, ANOVA, Head Count Ratio, Poverty Gap, Severity of Poverty Index, and the Multidimensional Poverty Index (MPI). Secondary data were obtained from government reports, NITI Aayog, the Economic Survey of Assam, the World Bank, and peer-reviewed journals. According to the World Bank (2022), India's poverty line is ₹1,059.42 per month in rural areas and ₹1,286 per month in urban areas.

DISCUSSIONS AND RESULTS

Table-2: Distribution of respondent's household's family members across various category

Family Structure	Frequency	Percentage
1.Adult Male (15- 65+)	1050	30.4
2.Adult Female (15-65+)	1000	28.9
3.Children (mostly infants and below 5 years)	800	23.1
4.Earners adult male	200	NA
5.Earners adult Female	100	NA
6.Students (5-14 yrs)	600	17.6
Total	3450 (1+2+3+6)	100

Source: Author's construction based on primary field survey data.

Table 2 and figure-1 presents the family composition of the 400 surveyed households, comprising a total of 3,450 members. Among them, 1,050 (30.4%) were adult males, 1,000 (28.9%) were adult females, 800 (23.1%) were children below five years, and 600 (17.6%) were school-going children aged 5–14 years. The survey also found that only 200 adult males and 100 adult females were earning members. Thus, only 300 out of 2,050 adults (14.6%) were engaged in income-generating activities, leaving a large proportion of household members economically dependent.

The findings indicate a high dependency ratio, with relatively few earners supporting large families. Limited employment opportunities and low household income reduce the ability of families to meet basic needs such as food, education, healthcare, and housing, thereby contributing to persistent rural poverty. The results further suggest that poverty is associated with unemployment, low educational attainment, poor health, and inadequate financial resources. Despite various government welfare programmes and the vision of Viksit Bharat @2047, many rural households continue to experience economic hardship. Strengthening employment opportunities, education, skill development, and effective implementation of poverty alleviation programmes is essential for improving their socio-economic conditions.

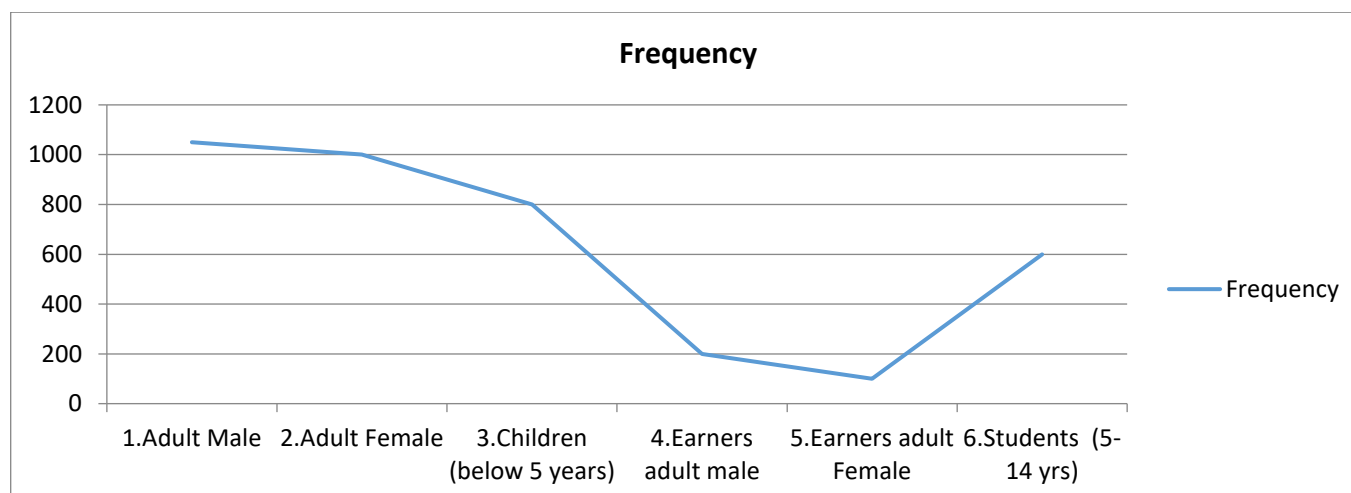


Figure-1

Table-3: Distribution of respondent's household family members across male dependents and children (below 5 years) in family

Family Structure	Frequency	Percentage
Dependent Male/Female	850	52
Dependent Children(< 5 years)	800	48
Total	1650	100

Dependency Ratio

Dependency Ratio:

$$=100 \times (\text{Population (0-14)} + \text{Population (65+)}) / \text{Population (15-64)}$$

$$=100 \times 1400 + 10 / 2040$$

$$=1400 + 10 / 2040$$

$$=1410 / 2040$$

$$=0.69$$

The dependency ratio is calculated and it is observed that it is 0.69 which is around 69%. If we estimate the all India dependency ratio it comes around 50% but the matter of regret comes from the observation of the above analysis which represents the high ratio of 69% of these poor 400 households, which depicts high level of poverty. However, such problems have not been addressed. The flagship programs eliminating poverty have not properly reached these households. Alternative income sources by these households have become necessary for these households if they expect to come out from such dreadful situation. No schemes or any so called promising support of the government can make them sufficient. It would be positive impact if alternative sources are given importance like forming groups of SHG and concentrating on handicrafts work, or farmers jointly forming groups for farming of cultivation of essential agro-products with high market demand studying the time duration and suitability of soil conditions and climatic conditions.

Table-4: Distribution of respondent's households across occupation in the study area

Occupation	Frequency	Percentage
Daily wage earner	80	20
Agriculture(Farmer)	100	25
Service	0	0
Vendors (vegetable and others)	140	35
Transport Service	0	0
Other activities	10	2.5
Un-employed	70	17.5
Total	400	100

Source: Author's construction based on primary field survey data.

Table-4, indicates that around 35% of the total households represent earning their regular income mostly by selling vegetables which are purchased from outside the village. As cultivation is affected in most of the areas of the village due to severe floods during the summers. So the vendors have to depend upon the supply of vegetables from outside. Though Schemes like MGNREGA had given employment, however the beneficiaries are scattered in a lower proportion. Giving employment to less than 100 days with lower wage rate (as mentioned by respondents) and severe exploitation of the contractors etc.

Table-5: Distribution of respondent's households across land size holdings

Land Holding Size	Households	Percentage
Marginal Farmers with land	20	5
Small Farmers with land	80	20
Medium Size Farmers with land	2	0.5
Big Farmers	0	0
Landless Wage Earners	200	50
Landless Farmers	98	24.5
Total	400	100

Source: Author's construction based on primary field survey data.

Table-5: indicates respondent's households across land size holdings. Most of the households are landless. They don't possess a secured land. Their habitation or dwelling places are mostly unsecured lands which are eroded during the heavy floods in summers. It is evident from the observation that around 50% of the total households are landless wage earners. Around 5% are poor farmers who possess land and around 24.5% of the households are landless farmers. Around 20% of the total households are medium size farmers who possess land. Land as a factor of production is an asset to the farmer, however land by the side of rivers cannot be considered as secured whether it is possessed by any farmer. The farmer is landless as floods washed off. So support to the farmer is required to maximize his outputs during the winters and earn profits as well as a safe place to shelter during heavy floods. Poverty is difficult to calculate under such situations. The scheme "Mukhya Mantri Krishi Sa Sajuli Yojana", a State Owned Priority Development (SOPD) scheme, Interest free crop loans, etc. such schemes haven't reached the households.

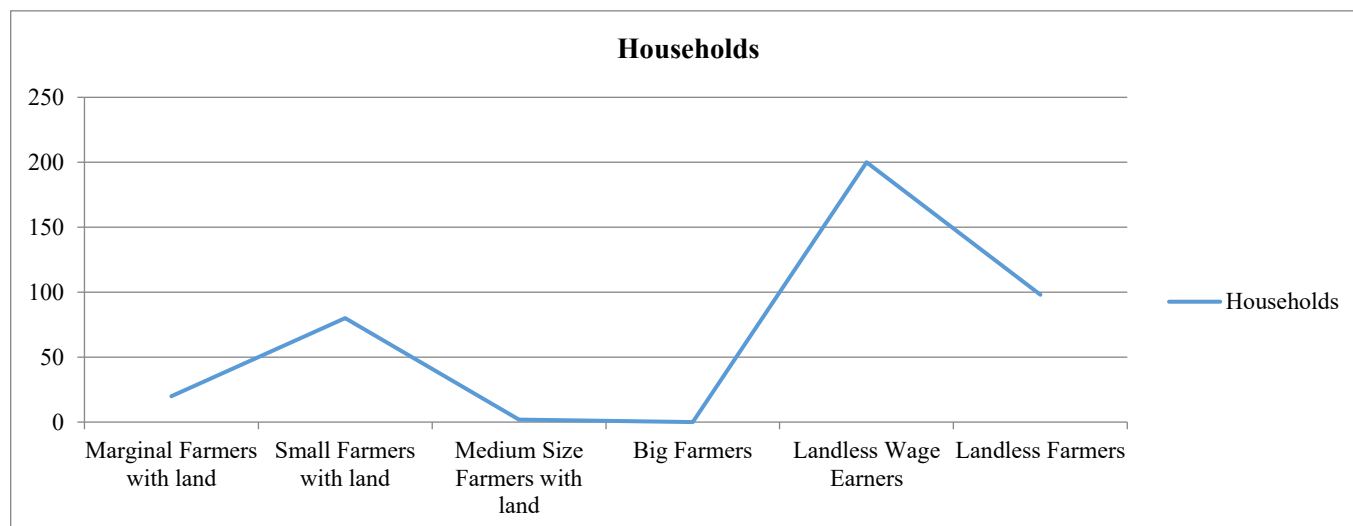


Figure-2

Table-6: Distribution of respondent's households across times of rural indebtedness in a year

Times of rural indebtedness per year	Frequency	Percentage
Once	397	99.3
Twice	2	0.4
Three	1	0.3
Total	400	100

Source: Author's construction based on primary field survey data.

Table-6: indicates that around 99.3% of the total respondents took credit once in a year, 0.3% of the total respondents took credit for three times in a year. Around 0.4% of the total respondents took credit for twice in a year. The habit of credit in poverty is unending, needs multiply making poor households poorer, as there is lack of sources of income. NGO 's and government agencies have a greater role to encourage and organize capacity building programs increasing the efficiency as well as make them aware about the various self-employment prospects as well as the various financial assistance provided by the government.

Table-7: Distribution of average monthly expenditure of BPL Households (200 Households)

BPL Households Expenditure Items	Average monthly expenditure (Rs)	Percentage
Food	400	47.06
Clothing	200	23.53
Health and Medicine	50	5.88
Transportation	20	2.35
Education	100	11.76
Social Obligation	60	7.06
Others	20	2.35
Total Expenditure/Month	850	100
Per day expenditure	28.3333	3.3333

Source: Author's construction based on primary field survey data.

As per the panel headed by former RBI governor C Rangarajan, those spending over Rs. 32 a day in rural areas and Rs.47 in towns and cities should not be considered poor. Table-7 indicates the average monthly expenditure of 200 households out of the 400 rural Households who cannot afford to spend more than Rs 28/ per day. Hence as per the RBI's definition they fall under the category of Below poverty line (BPL). However, the expenditure patterns slightly differ among the 200 households. The average monthly expenditure of Rs 850/ which is observed to be at the maximum is taken into consideration. Unstable and irregular income with large size of families is some of the factors of their poverty. Mostly they have a family size of 8 members.

Table 8: Distribution of average monthly income of BPL households

Number of BPL Households with different income levels	Average monthly income (Rs)
100	850

50	870
50	890

Source: Author's construction based on primary field survey data.

Table-8: indicates that around 200 rural households whose income levels have been classified comes under the category of Below Poverty Line. They are not capable to earn an income of Rs 1000/ per month. It is clearly defined that those households, whose annual income falls below Rs. 27000/ in India, can be considered as Below Poverty Line (BPL). However, it is defined that those rural households who earn less than Rs 12000/ per annum in Assam can be considered under the category of Below Poverty Line.

Head-Count Ratio:

Head Count Ratio (HCR) of households considered BPL = BPL population / total population

$$= 200 \times 7 / 3450$$

$$= 1400 / 3450$$

$$= 40.58\%$$

Table-8: indicates the average monthly income of the BPL households who earns less than 1000/ pm. These households may be daily wage earners, vegetable vendors, or involved in any other occupations as mentioned in Table- 4. However, the reason of less wages or day to earnings with unstable and irregular income are some of the important factors. Lack of interference of government machineries, corruption, misappropriation of funds for the developments of these rural households in the flood prone areas are some other factors for their poverty. The poverty line stands at Rs. 435/ and HCR is almost equal to 40.58%. As stated in the Human Poverty Index (1999) poverty lies in 42.83% for the district of Barpeta.

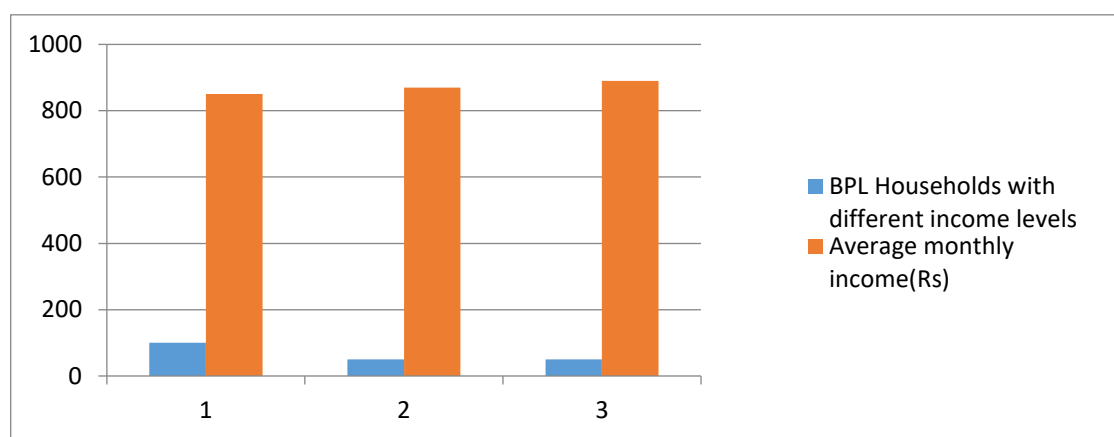


Figure-3

Table-9: Distribution of average monthly expenditure of Poor Households (150 Households)

Poor Households Expenditure Items	Average monthly expenditure (Rs)	Percentage
Food	400	41.24
Clothing	200	20.62
Health and Medicine	100	10.31
Transportation	20	2.06

Education	120	12.37
Social Obligation	60	6.19
Others	70	7.22
Total Expenditure/Month	970	100
Per day expenditure	32	3.30

Source: Author's construction based on primary field survey data

Table-9, indicates the various heads of average monthly expenditure of the poor households which stands as Rs 32/ per day which is extremely a low per capita expenditure in today's economy. Obviously these households almost 400 of them suffer from majority poverty levels though they are categorized as per their income levels under BPL, Poor and Moderately Poor categories. The table indicates the expenditure levels of 150 households who are poor households of the total 400 respondents. The expenditure patterns differ among 150 households. The maximum average monthly expenditure of Rs. 970 is taken into consideration.

Table 10: Distribution of average monthly income of Poor Households (150 Households)

Number of poor households	Monthly income(Rs)
40	965
60	970
50	990

Head Count Ratio (HCR) of households on poverty line= Number of poor households/total population

$$= 150 \times 5 / 3450$$

$$= 750 / 3450$$

$$= 21.74\%$$

Table -10: Indicates the average monthly income of 150 households with different income levels per month. The income levels are not satisfactory and difficult to support the family with large family size. From the expenditure point of view, they are not families who fall under the BPL category. However, they are considered as poor households as per the RBI, Rangaranjan committee report which states that those who spend more than Rs 32/ are not poor in rural areas. They fall in the border line. However, HCR reports 21.74% poor households which is less as compared to BPL households.

Table 11: Distribution of average monthly income of Households above poverty line (50 Households)

Number of households above poverty line	Monthly income(Rs)
30	1500
10	1600
10	1800

Source: Author's construction based on primary field survey data.

Multi-Dimensional Poverty Index (MPI):

Table-12: Distribution of BPL households across types of deprivations and deprivation scores.

Deprivations with dimensions	No of Households (BPL)	Total family members (BPL) suffering deprivations	Deprivation scores
Child Mortality, Nutrition, Sanitation, Drinking Water, Housing, Assets (Health, 50% of Standard of living)	150	1200 (75)	1.5/3=0.50
Schooling for minimum years (Education)	50	400 (25)	1/3=0.33
Total	200	1600 (100)	2.5/3=0.83

(Figures in parenthesis represent percentages) *Source: Author's construction based on primary field survey data.*

MPI = Head Count ratio (H) of the BPL households * intensity of poverty (A)

$$= 0.4058 \times 83.33/1600$$

$$=0.4058 \times 0.052081$$

$$=0.02113457125$$

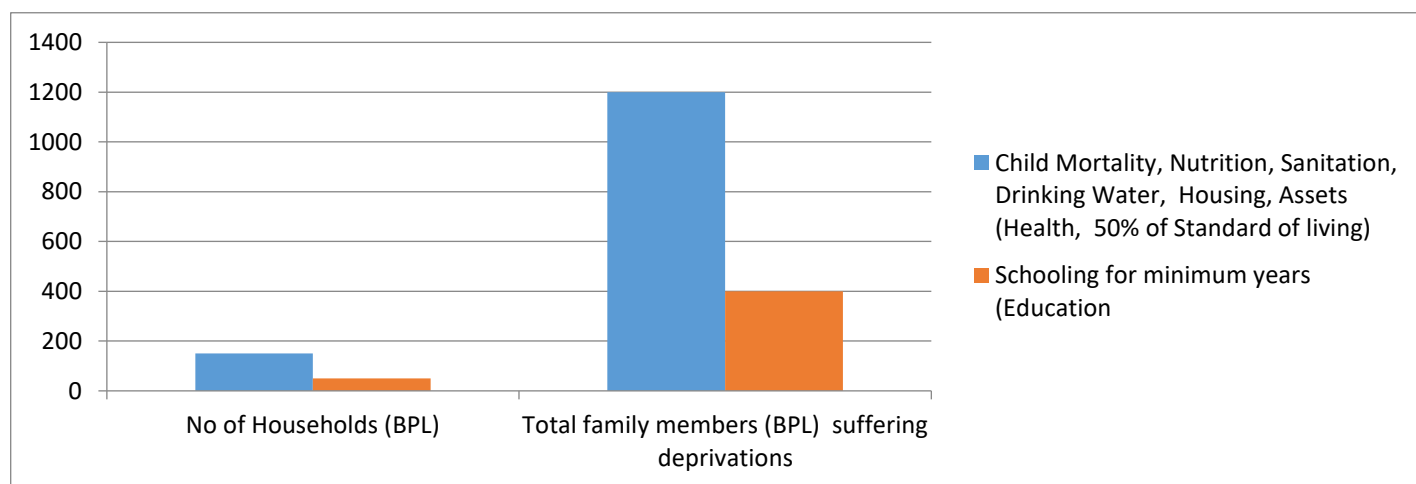


Figure-4

Table-12 and figure-4 indicates the types of deprivation and the deprivation scores. Around 75% of the total respondents are deprived from Child Mortality, Nutrition, Sanitation, Drinking Water, Housing, Assets (Health, 50% of Standard of living). Around 25% of the total respondents are deprived from Schooling for minimum years (Education). On the other hand, the sum total of the deprivation scores is 0.83 which is around 83%. If we observe the MPI which is 0.02113457125, that ranges within 0-1, the situation faces multi-dimensional poverty. The more is the value the higher is the multi-dimensional poverty. In the present day where the state government are busy in building smart cities with every facility it refers an uncivilized society where there is evidence of rural households being victims of multi-dimensional poverty. A situation which highlights lack of maintaining economic security throughout every level of income groups. There is even economic disparity between the rural households residing in different villages of the state. This points out the

various acts of corruption, misappropriation of funds, partiality, mismanagement in handling the various measures of the government in reducing poverty.

Poverty Gap Ratio:

Table-13: Distribution of BPL and Poor Households across monthly expenditure patterns.

	BPL Households (MPCE)			Poor Households (MPCE)	
100 Households	50 Households	50 Households	40 Households	60 Households	50 Households
830	840	850	960	965	970

Source: Author's construction based on primary field survey data.

Table-14: Households above poverty line

Number of households above poverty line	Monthly expenditure (Rs)
30	1100
10	1200
10	1230

Poverty Gap Ratio (PGR) = $1 / N [(Z - t) / Z]$

1. Poverty Gap Ratio (PGR) = $1 / N [(Z - t) / Z]$.
2. Here, N is the total number of households. = 400
3. Z is the poverty line MPCE cut-off.
4. t is the monthly per capita consumption expenditure (MPCE) of below-poverty-line households.

The value of Z (poverty line MPCE cut off) is Rs 960

$$5. \text{ PGR} = 1 / 400 [(960 - 830) / 960 + 1 / 400 [(960 - 840) / 960. + 1 / 400 [(960 - 850) / 960]$$

$$= 1/400 (130/960) + 1/400 (120/960) + 1/400 (110/960)$$

$$= 1/400 \times 0.13 + 1/400 \times 0.12 + 1/400 \times 0.11$$

$$= 0.03 + 0.0003 + 0.000275$$

$$= 0.06$$

The poverty gap ratio which is 0.06 is less than 1 which indicates that there is poverty of the above mentioned BPL households, and not much gap is highlighted with the poverty line. The needs of these households are high but as compared to the needs the resources are less. In this context these households require great support of financial assistance, sources of earning, to enhance their existing expenditure and income levels. It is only through government assistance, skill development and capacity building programs, the expectations of the poor rural households can be fulfilled to a considerable extent.

Severity of poverty:

$$SP = \frac{1}{n} \sum_{i=1}^Q \left(\frac{PT - X_i}{PT} \right)^2$$

where:

PT = per capita poverty threshold

X_i = per capita income/expenditure of the i th poor family/individuals

Q = number of family/individuals with per capita annual

income/expenditure less than the per capita poverty threshold

n = total number of families/individuals

Table-15: Monthly expenditure (Rs) across BPL households

	BPL Households (MPCE)	
100 Households	50 Households	50 Households
830	840	850

PT= The (poverty line MPCE cut off) =Rs 960

N= 400, PT=Poverty line= Rs 960/

X_i = expenditure of households below poverty line.

$SP = \frac{1}{400} \times \frac{(960-830)}{960} \times \frac{(960-830)}{960} + \frac{1}{400} \times \frac{(960-840)}{960} \times \frac{(960-840)}{960} + \frac{1}{400} \times \frac{(960-850)}{960} \times \frac{(960-850)}{960}$

$= \frac{1}{400} \times 0.13 \times 0.13 + \frac{1}{400} \times 0.12 \times 0.12 + \frac{1}{400} \times 0.11 \times 0.11$

$= \frac{1}{400} \times 0.0169 + \frac{1}{400} \times 0.0144 + \frac{1}{400} \times 0.0121$

$= 0.00004225 + 0.000036 + 0.00003025$

$= 0.0001085$

The value 0.0001085 which is much lower than 1, indicating inequality of poverty of the population living below the poverty line. A state of poverty where the households who are below the poverty line are deprived from many necessities such as food, shelter, clothing, health, sanitation, education, drinking water, income and expenditure etc.

IMPACT OF EDUCATION ON RURAL POVERTY- CORRELATION ANALYSIS

Education:

Table 16: Gender-wise distribution of the total population across educational status

Educational Status	Male	Female	Total
No Schooling	450 (56.25)	350 (43.75)	800 (100)
Illiterate	500 (38.02)	815 (61.98)	1315 (100)

Lower Primary	700 (87.50)	100 (12.50)	800 (100)
Primary	200 (66.67)	100 (33.33)	300 (100)
High School	80 (40)	120 (60)	200 (100)
Matric	10 (50)	10 (50)	20 (100)
Higher Secondary	11 (73.33)	4 (26.67)	15 (100)
Total	1951	1499	3450

Source: Author's construction based on primary field survey data.

Table -16, indicates, out of the total non-schooling 56.25% are male and 43.75% are female, mostly infants. Of the total illiterates 38.02% are male and 61.98% are female. Of the total lower primary schooling 87.50% are male and 12.50% are female, Of the total primary schooling 66.67% are male and 33.33% are female. Of the total high school schooling 40% are male and 60% are female. Of the total HSLC completed 50% are male and 50% female. Of the total HS level around 73.33% are male and 26.67% are female. The overall illiteracy level is very high which makes the households lives more complex as knowledge and education matters success in many issues, such as discussing about income and employment generation. The effort of the government in reducing illiteracy under the initiative of 'Education for all', is yet to reach these poor households.

Table-17: Distribution of BPL Households across monthly expenditure patterns. (includes mostly illiterates and Lower Primary levels)

Categories of BPL Households	Average monthly Expenditure level of BPL (mostly illiterates and Lower Primary levels)	Total Monthly Expenditure of Households	Average monthly Income level of BPL (mostly illiterates and lower Primary Levels))	Total Income of Households
100	850	85000	850	85000
50	800	40000	870	43500
50	800	40000	880	44000

The table-17, indicates the category of monthly expenditure which is taken as average within the range of (Rs 800-850) and monthly income within the range of Rs. (850-880) per month. All such categories of households comprised mostly of illiterates and lower primary educational levels, with lack of schooling and education. Education is considered as a socio-economic factor where lack of education is responsible for low-level of income of the households below poverty line leading to poverty in the households. To justify whether low level of education can be considered as an economic factor for poor income would be true or not true. The regression model is prepared to check the fact.

Experiment 1:

Table-18: (BPL Households): To justify lack of Education is responsible for low level of income and poverty.

Descriptive Statistics			
	Mean	Std. Deviation	N
Exp_Illiterates_LP	55000	25980.76	3
Inc_Iliterate_LP	57500	23817.01	3

The average total monthly expenditure of the three categories of BPL households (comprising of illiterates and lower primary) with 3 different levels of monthly expenditure (Table-18) is Rs 55000/. Similarly, the average total monthly income of the three categories of BPL households (comprising of illiterates and lower primary) with 3 different levels of monthly income (Table-18) is Rs 57,500/. In our country there is huge disparity in the expenditure and income level there is no specific levels in the income and expenditure levels of the households leading to poverty. There are individuals who earn a monthly salary of 60000-70000/or more, per month and evidence of lower income groups as (Table-18) who just survive in the society. The standard deviation highlights high income and expenditure inequality with vast differences with mean levels.

Table-19: Pearson's Correlation between Income and Expenditure among Illiterate Households (BPL Group)

Correlations			
		Exp_Illiterates_LP	Inc_Iliterate_LP
Pearson Correlation	Exp_Illiterates_LP	1	0.999945
	Inc_Iliterate_LP	0.999945	1
Sig. (1-tailed)	Exp_Illiterates_LP	.	0.003341
	Inc_Iliterate_LP	0.003341	.
N	Exp_Illiterates_LP	3	3
	Inc_Iliterate_LP	3	3

A positive co-relation exists with Income and expenditure of the BPL (comprising of illiterates and Lower Primary level educational status.)

Table-20: Model Summary of Regression Analysis between Income and Expenditure among Illiterate Households (Low Poverty Group)

Model Summary(b)										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	0.99994	0.99989	0.99978	385.673	0.99989	9075	1	1	0.006683	2.51807

a	Predictors: (Constant), Inc_Iliterate_LP
b	Dependent Variable: Exp_Illiterates_LP

Table-20: represents as to how well our linear regression models best fits with the data set as provided for table-7 (Distribution of BPL Households across monthly expenditure patterns.) The R squared which is also known as the co-efficient of determination which comes around 0.9 and near to 1 can almost be perfectly explained by the predictor. Predictor being the average total monthly income of BPL households with illiterates and lower primary educational status, and dependent variable being total average monthly expenditure of the BPL households with mostly illiterates and lower primary educational status. The model best fits in this situation. The Durbin Watson which is 2.5 represent no positive auto co-relation in the model. The significance F change is equal to the ANOVA p-value which is 0.006

Table -21: ANOVA Results for Regression of Expenditure on Income among Illiterate Households (Low Poverty Group)

ANOVA(b)						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.35E+09	1	1.3E+09	9075	0.0067
	Residual	148743.9	1	148744		
	Total	1.35E+09	2			
a	Predictors: (Constant), Inc_Iliterate_LP					
b	Dependent Variable: Exp_Illiterates_LP					

Table-21: The ANNOVA p-value which represent a higher statistical significance. Here $p=.006$, which is less than .05 confidence level or $p < 0.05$. In other words, one can be more confident that the results are true. It justifies that due to lack of education the income level of the households is low and so also the expenditure levels are low. These households identified fall under BPL category mostly comprising of earning individuals who are mostly illiterates or lower primary levels of education.

Table-22: Regression Coefficients Showing the Effect of Income on Expenditure among Illiterate Households (Low Poverty Group)

Coefficients(a)									
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	-7720.36	695.02713		-11.11	0.0572			
	Inc_Iliterate_LP	1.090789	0.0114503	0.9999	95.263	0.0067	0.9999	1	0.9999
a	Dependent Variable: Exp_Illiterates_LP								

Table 22: indicates standardized co-efficient (Beta) of 0.99 means strong positive correlation between the predictors (independent) variable and outcome (dependent) variable. A low p-value (usually less than 0.05) that is $p=0.006$ here, indicates that the coefficient is unlikely to be zero by chance, and thus it is statistically significant.

Table-23: Distribution of Poor Households across average monthly income/ expenditure levels (include small proportion of Illiterates, and of Lower Primary levels and mostly High school levels)

Total Households	Average Monthly income(Rs)	Average Total Monthly income(Rs)	Average Monthly expenditure(Rs)	Average total monthly expenditure(Rs)
40	966-967	38650	975-976	39020
50	970	48500	970	48500
60	970	58200	970	58200

The table-23 indicates the category of monthly expenditure /income which is taken as an average within the range of (Rs 970-976) and monthly income in the range of Rs. (966-970) per month. All such categories of households comprised a small proportion of illiterates, lower primary and mostly high school educational levels, Education are considered as a socio-economic factor where lack of education is responsible for low-level of income. But in case of poor household's level of education is increased to a certain extent. To justify whether rise in the level of education in the poor household's category is responsible for rise in income. The regression model is prepared to check the truth.

Experiment 2(Poor Households):

To justify an increase in educational level is responsible for raise in income compared to BPL households.

Table-24: Descriptive Statistics of Monthly Income and Total Expenditure among Poor Households

Descriptive Statistics			
	Mean	Std. Deviation	N
Total_exp_poor	48573.33	9590.21	3
Month_inc_poor	48450	9775.096	3

The average total monthly expenditure of the three categories of poor households (includes small proportion of illiterates and lower primary and mostly high school levels) with 3 different levels of average total monthly expenditure (Table-24) is Rs 48,573/-. Similarly, the average total monthly income of the three categories of poor households (comprising of small proportion of illiterates and lower primary and mostly high school educational levels) with 3 different levels of monthly expenditure (Table-24) is Rs 48,450/-. The standard deviation high lights high income and expenditure inequality with vast differences with mean levels.

Table-25: Pearson's Correlation between Monthly Income and Total Expenditure among Poor Households

Correlations			
		total_exp_poor	Month_inc_poor
Pearson Correlation	total_exp_poor	1	0.999939
	Month_inc_poor	0.999939	1
Sig. (1-tailed)	total_exp_poor	.	0.003518
	Month_inc_poor	0.003518	.

N	total_exp_poor	3	3
	Month_inc_poor	3	3

A positive co-relation exists with Income and expenditure of the Poor households (comprising of small proportion of illiterates and Lower Primary and mostly high school level educational status.)

Table-26: Model Summary of Regression Analysis between Monthly Income and Total Expenditure among Poor Households

Model Summary(b)									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change
1	0.99994	0.99988	0.9998	149.89	0.99988	8186	1	1	0.007
a Predictors: (Constant), Month_inc_poor									
B Dependent Variable: total_exp_poor									

Table-26: represents as to how well our linear regression models best fits with the data set as provided for table 6 (Distribution of poor households across monthly expenditure patterns.) The R squared which is also known as the co-efficient of determination which comes around 0.9 and near to 1 can almost be perfectly explained by the predictor. Predictor being the average total monthly income of poor households with small proportion of illiterates and lower primary educational status, and mostly high school educational level and dependent variable being total average monthly expenditure of the poor households. The model best fits in this situation. The Durbin Watson which is 2.9 which represent no auto co-relation.

Table-27: ANOVA Results for Regression of Total Expenditure on Monthly Income among Poor Households

ANOVA(b)						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.84E+08	1	1.84E+08	8186.148	0.007036
	Residual	22467.44	1	22467.44		
	Total	1.84E+08	2			
a	Predictors: (Constant), Month_inc_poor					
b	Dependent Variable: total_exp_poor					

Table-27: The ANOVA p-value which represent a higher statistical significance. Here $p=.007$, which is less than .05 confidence level or $p< 0.05$. In other words, one can be more confident that the results are true. It justifies that a little rise in education level in the poor households leads to a little rise in the income level of the poor households as compared to BPL households. These households identified fall under poor category mostly comprising of earning individuals who include small proportion of illiterates or lower primary levels mostly of high school educational status.

Table-28: Regression Coefficients Showing the Effect of Monthly Income on Total Expenditure among Poor Households

Coefficients(a)						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1042.6	532.4131		1.958	0.3006
	Month_inc_poor	0.981	0.010843	0.99994	90.48	0.007
a	Dependent Variable: total_exp_poor					

Table 28: indicates standardized co-efficient (Beta) of 0.99 means strong positive correlation between the predictors (independent) variable and outcome (dependent) variable. A low p-value (usually less than 0.05) that is p=0.007 here, indicates that the coefficient is unlikely to be zero by chance, and thus it is statistically significant.

Table-29: Distribution of above poverty line across average monthly income/ expenditure levels (include small proportion of Illiterates, and of Lower Primary levels and mostly High school, secondary and higher secondary levels)

Total Households	Average Monthly income(Rs)	Average Total Monthly income(Rs)	Average Monthly expenditure(Rs)	Average total monthly expenditure(Rs)
30	1500	45000	1167	35000.0
10	1600	16000	1100	11000.0
10	1700-1800	18000	1230	12300.0

Table- 29: indicates the category of monthly expenditure which is taken as an average within the range of (Rs 1167-1230) and monthly income in the range of Rs. (1500-1800) per month. All such categories of households comprised a small proportion of illiterates, lower primary and mostly high school, secondary and higher secondary education, educational levels, Education are considered as a socio-economic factor where lack of education is responsible for low-level of income. But in case of APL (above poverty line) households level of education is increased to a certain extent. To justify whether rise in the level of education in the above poverty line household's category is responsible for rise in income. The regression model is prepared to check the truth.

Experiment 3(Above poverty line Households):

To justify an increase in educational level is responsible for raise in income compared to BPL and Poor households.

Table-30 Descriptive Statistics of Total Income and Total Expenditure among APL Households

Descriptive Statistics			
	Mean	Std. Deviation	N
apl_totexp	19433.33	13496.79	3
apl_totinc	26333.33	16196.71	3

The average total monthly expenditure of the three categories of the above poverty line households (includes small proportion of illiterates, lower primary, mostly high school, secondary and higher secondary educational levels) with 3 different levels of average total monthly expenditure (Table-30) is Rs19433.33/. Similarly, the average total monthly income of the three categories of poor households (comprising of small proportion of illiterates, lower primary, and mostly high school, secondary and higher secondary educational levels) with 3 different levels of monthly income (Table-30) is Rs26333.33/. The standard deviation highlights moderate income and expenditure inequality with lower differences with mean levels, the condition being better than other two levels.

Table-31: Pearson's Correlation between Total Income and Total Expenditure among APL Households

Correlations			
		apl_totexp	apl_totinc
Pearson Correlation	apl_totexp	1	0.999907
	apl_totinc	0.999907	1
Sig. (1-tailed)	apl_totexp	.	0.00433
	apl_totinc	0.00433	.
N	apl_totexp	3	3
	apl_totinc	3	3

A positive co-relation exists with Income and expenditure of the above poverty line households (comprising of small proportion of illiterates, Lower Primary and mostly high school, secondary and higher secondary educational status.)

Table-32: Model Summary of Regression Analysis between Total Income and Total Expenditure among APL Households

Model Summary(b)										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	0.999907	0.999815	0.99963	259.618	0.99981	5404.3	1	1	0.0087	2.38945
A Predictors: (Constant), apl_totinc										
b	Dependent Variable: apl_totexp									

Table-32: represent as to how well our linear regression models best fits with the data set as provided for table-11 (Distribution of above poverty line households across monthly income/ expenditure patterns.) The R squared which is also known as the co-efficient of determination which comes around 0.9 and near to 1 can almost be perfectly explained by the predictor. Predictor being the average total monthly income of the above poverty line households with small proportion of illiterates, lower primary educational status, and mostly high school, secondary and higher secondary educational levels and dependent variable being total average monthly

expenditure of the poor households. The model best fits in this situation. The Durbin Watson which is 2.3 which represent no auto co-relation.

Table-33: ANOVA Results for Regression of Total Expenditure on Total Income among APL Households

ANOVA(b)						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.64E+08	1	3.6E+08	5404.32	0.0087
	Residual	67401.52	1	67401.5		
	Total	3.64E+08	2			
a	Predictors: (Constant), apl_totinc					
b	Dependent Variable: apl_totexp					

Table-33: The ANOVA p value which represent a higher statistical significance. Here $p=.008$, which is less than .05 confidence level or $p<0.05$. In other words, one can be more confident that the results are true. It justifies that rise in education levels of the above poverty line households lead to rise in the income level of the APL (above poverty line) households as compared to BPL and Poor Households These households identified fall under above poverty line category mostly comprising of earning individuals who include small proportion of illiterates, lower primary levels and mostly of high school, secondary and higher secondary educational status.

Table-34: Regression Coefficients Showing the Effect of Total Income on Total Expenditure among APL Households

Coefficient s(a)						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2508.32	333.9922		-7.5101	0.0843
	apl_totinc	0.833227	0.011334	0.99991	73.5141	0.0087
a	Dependent Variable: apl_totexp					

Table-34: indicates standardized co-efficient (Beta) of 0.99 means strong positive correlation between the predictors (independent) variable and outcome (dependent) variable. A low p-value (usually less than 0.05) that is $p=0.008$ here, indicates that the coefficient is unlikely to be zero by chance, and thus it is statistically significant.

COMPARATIVE STUDY

The income and expenditure patterns of the three main categories of households Below poverty line (BPL), Poor and Above Poverty Line, considering the impact of education as a factor is responsible with the rise and fall in income levels affecting expenditure. And it is observed through inferential statistics (regression analysis) that income differs within the categories depending upon the level of educational status of the earning individuals of the categories respectively.

In the above cases it is observed that households above poverty line has better income levels as earning individuals have an educational background having mostly high school, secondary and higher secondary levels besides smaller proportions of illiterates, lower primary levels.

Poor Households have earning individuals who has mostly high schooling status and smaller proportion of illiterates and lower primary levels. The income levels of these households are comparatively less than above poverty line households.

In case of households under Below poverty line have earning individuals who have mostly illiterates and lower primary educational levels. The income levels are least as compared to the other two levels. Our experiments through the regression analysis highly proves the truth through the ANOVA p-values under the three categories that lack of education is one of the socio-economic factor leading to poor level of income and poverty.

Table-35: (ANNOVA p-value)

Categories of Households	ANOVA p -values
BPL	0.006
Poor	0.007
APL	0.008

The higher range of statistical significance is observed in APL where ANOVA p-value is .008 followed by poor households where ANOVA p-value is .007 and lastly BPL households where ANOVA p-value is .006. The more is the value lesser than 1, more is the statistical significance. It proves that lack of education as one of the socio-economic factor responsible for poor income levels.

MAJOR FINDINGS

1. High incidence of rural poverty: The study found that 40.58% of the surveyed households were living below the poverty line (BPL), indicating that rural poverty remains a serious challenge in the selected villages of Barpeta district despite ongoing poverty alleviation programmes.

2. Education significantly influences household income: Regression and ANOVA analyses confirmed a statistically significant positive relationship ($p < 0.05$) between educational attainment and household income, establishing education as a major determinant of economic well-being.

3. Educational deprivation is concentrated among poor households: Most BPL households had earning members with no formal education or only primary education, whereas households above the poverty line generally had secondary or higher educational qualifications.

4. Landlessness is a major cause of poverty: About 74.5% of the surveyed households were landless (50% landless wage earners and 24.5% landless farmers), making them highly vulnerable to unemployment, floods, and income insecurity.

5. Very low income and consumption among BPL households: BPL households earned only ₹850–₹890 per month and spent approximately ₹28 per person per day, limiting their access to food, education, healthcare, and other essential services.

7. Floods and weak livelihood opportunities intensify poverty: Frequent floods, seasonal unemployment, limited non-farm employment, and ineffective implementation of development programmes continue to reinforce rural poverty and discourage educational investment.

RECOMMENDATIONS

1. Strengthen access to quality education: Expand educational infrastructure, improve enrolment and retention, provide scholarships and free learning materials, and reduce dropout rates, particularly in flood-prone rural areas.

2. Promote vocational and skill development: Introduce market-oriented vocational training, entrepreneurship development, and digital literacy programmes to improve employability and diversify rural income sources.

3. Create sustainable livelihood opportunities: Promote non-farm employment through agro-processing, fisheries, livestock, cottage industries, and self-employment initiatives to reduce dependence on seasonal agriculture.

4. Improve implementation of poverty alleviation schemes: Strengthen monitoring, transparency, and accountability in programmes such as MGNREGA, PMAY-G, and livelihood missions to ensure timely and equitable delivery of benefits.

5. Provide targeted support to vulnerable households: Expand access to social security, interest-free credit, crop insurance, flood-resilient infrastructure, and land development programmes for landless and flood-affected families.

6. Promote adult literacy and community awareness: Implement adult education, financial literacy, gender awareness, and skill development programmes to improve household decision-making and economic opportunities.

7. Adopt integrated education–poverty policies: Formulate district-specific development strategies that combine education, employment generation, healthcare, disaster resilience, and social protection to achieve sustainable poverty reduction and support the Sustainable Development Goals (SDGs).

CONCLUSION

The study establishes that educational attainment is a critical determinant of rural poverty in Barpeta district, Assam. The findings reveal that a substantial proportion of households continue to live below the poverty line, with low educational attainment closely associated with lower income and expenditure levels. Statistical analyses, including correlation, regression, and ANOVA, confirm a significant positive relationship between education and household income across BPL, Poor, and APL households. The study further identifies landlessness, flood vulnerability, and limited livelihood opportunities as factors that reinforce the poverty cycle. These findings underscore that improving access to quality education, vocational skills, and sustainable employment opportunities can substantially enhance household incomes and reduce poverty. Therefore, integrated education-centred development policies are essential for achieving inclusive rural development and the Sustainable Development Goals.

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