



Status of Education in Uttarakhand: Progress, Challenges, and Future Prospects

Chandan Singh^{1*} Pranjal Kandwal² Vijay Bahuguna³

¹Department of Geography, DBS (PG) College Dehradun.

²Department of Statistics, SRT Campus, HNBSU Badshahi Thaul Tehri Garhwal

*Corresponding author's email Id: Chandan.gariya268@gmail.com

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Abstract: This research paper examines and evaluates the problems related to education, such as educational achievement, infrastructure, policy requirements, deficiencies at various educational levels, and the best ways to close the gaps. Many individuals in this state leave their homes and land in search of employment, and education is a determining factor in the positions and income levels of migrants. In Uttarakhand, advancing education and human resource capacity building is a very difficult undertaking. The gender gap is nearly 15 percentage points, while the adult literacy rate stands at 84.62%. This clearly highlights the urgent need for the state to improve female literacy and education to achieve SDG Goal 4. Additionally, the decrease in the GER from secondary to higher secondary levels points to retention challenges and difficulties in progressing to higher education. In Uttarakhand, there is a need for coordinated policy actions and interventions to boost and sustain enrolment in higher education.

Keywords: Education in Uttarakhand; Enrollment Ratio; Access; Literacy

Introduction

Education ought to be related to the life, needs and aspirations of the people so as to be a powerful instrument of social, economic and cultural transmission (Education Commission 1964-66). An essential component of human growth and development is education. The procedure is never-ending. Therefore, it is crucial that the idea of education be thoroughly understood in order to be applied to the improvement of individuals living in various civilizations. Education has always been an agent that contributes to upgrading human society, flourishing personal talents, fulfilling civic responsibilities, and carrying the tradition forward. (Trilling and Hood 2000). As a touchstone, education has the power to alter a person's course in life and propel them to the pinnacles of success, money, status, and knowledge. The well-being of society is increased by the numerous positive externalities that education produces (Tilak 2008). Better-educated parents are known to raise healthier and more educated children, which has beneficial intergenerational well-effects on the welfare of future generations (Sen & Dreze 2002). In order to achieve the Sustainable Development Goal 4, everyone must have access to high-quality education by 2030 that is inclusive, equitable, and encourages opportunities for lifelong learning. Since education is connected to many aspects of human existence, it is impossible to define in its entirety. Education is a dynamic, abstract concept. It is an ongoing process. Throughout its history, education has undergone numerous ages and phases. Depending on the circumstances that existed at the time, it had many meanings, purposes, and goals. The idea of education is still developing, and this process will never be finished. To be able to handle the shifting needs, it must constantly develop and adapt. Education is purposefully designed to change



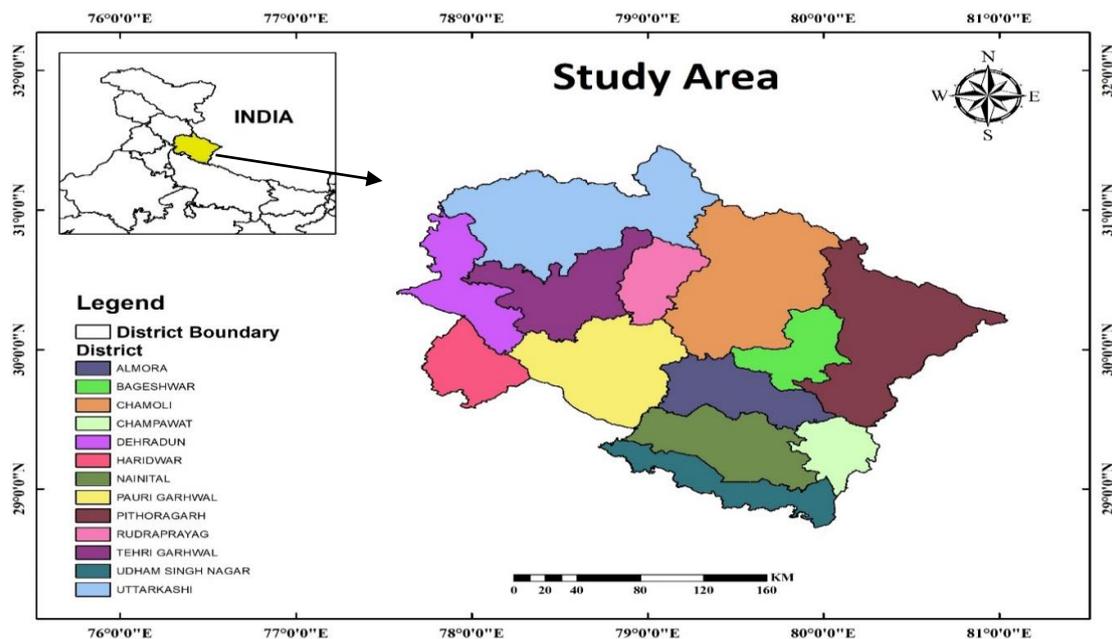
behaviour. In Uttarakhand, there are significant disparities across socio-economic categories, as well as between the plains and hilly districts. The hill districts are underdeveloped in areas such as roads, irrigation, electricity, education, and other infrastructure. This infrastructure imbalance is contributing to a growing gap in income and livelihoods between the plains and the hills. On several development indicators, the plain districts outperform the hill districts. The two regions differ greatly, with the mountainous terrain of the hill districts being a key factor in their slower development compared to the plains.

Review of Literature

Schools in India play a vital role in preparing girls for adulthood by equipping them to manage a home, earn independently if needed, and fulfill their civic duties. Progress in girls' education depends on changing societal attitudes (Sahoo 2016). Educational inequality in India from 1993 to 2009 shows that by 2009, 32% of those aged 15+ were illiterate, with only 8% attaining higher education, and disparities persisted across rural-urban areas and states (Agrawal 2014). Early academic skills are shaped by the home environment, where low literacy and stress hinder progress, while under-resourced schools in low-SES areas exacerbate the issue (Aikens & Barbarin 2008). Elementary education is foundational, and in Srinagar, students' performance at higher levels is influenced by socio-economic status and school quality (Kumar 2008). To achieve universal education with equity in Uttarakhand, it is essential to focus on promoting community involvement and empowerment in the management of education. (Sati 2019).

Study Area

There are two administrative regions in Uttarakhand: the Garhwal region, which includes seven districts, and the Kumaon region, which has six districts. Three districts are primarily plain, while ten districts are hill districts (Fig 1)



Source: Survey of India & Arc GIS 10.8

Fig.1 Location map of the study Area



In 2011, there were 100.7 lakh people living in the state, with roughly 70% of them living in rural areas and 30% in urban areas. It consists of 16793 census villages, of which 15,745 are inhabited and the remainder 1048 are uninhabited; it also comprises 13 districts, 49 subdivisions, and 95 development blocks. About 50.94 percent of the population was male, and 49.1 percent was female.

There were 963 females for every 1,000 males. In 2011, the state's overall literacy rate was 78.8%, with higher rates for males and females than the comparable percentages for all of India (87.4 and 70.0 percent, respectively).

Methodology

This Research Paper examines educational progress and difficulties in Uttarakhand, with an emphasis on access, enrollment, retention, and learning outcomes at the basic level. It uses secondary data, gathered from both government and non-government sources. In this paper use to bar diagram for the representation of data. The paper states that, despite significant investment in education, the quality of instruction in government schools remains poor, resulting in the expansion of huge private schools in locations with a lucrative market.

Results and Discussion

Education Level

Uttarakhand, known as an education hub, houses several prestigious institutions, such as IIT Roorkee and the Doon School, primarily in the plains. About 56.6% of the population aged 15 and above in the state has attained secondary education or higher, exceeding census estimates of 42.5% for the 15–59 age group. However, 43.3% of the population remains under-educated, including 15.3% illiterate and 28% with only primary or upper primary education. Educational attainment varies across districts, with hill regions generally outperforming plains districts (Table 1).

Table 1. District-wise Proportion of Population by Education Level (%)

Districts	Primary and Upper Primary	Secondary	Higher Secondary	Higher Education	Diploma	Illiterate
Hill District						
Uttarkashi	20.59	15.59	22.67	21.56	1.02	18.53
Tehri Garhwal	22.85	19.1	27.22	12.31	2.23	16.3
Rudraprayag	23.83	20.96	24.83	15.37	0.41	14.57
Pithoragarh	28.7	21.49	22.95	16.27	0.09	10.46
Nainital	28.11	19.02	19.35	19.94	0.45	13.1
Pauri Garhwal	23.23	19.5	25.8	16.78	2.56	12.12
Champawat	34.09	19.31	18.36	11.47	0.35	16.43
Chamoli	24.13	21.09	22.65	16.75	0.24	15.18
Bageshwar	21.69	21.1	28.71	15.39	0.4	12.71
Almora	25.86	23.14	21.76	12.93	0.99	15.31
Plain District						
U. S. Nagar	28.77	17.87	19.06	20.67	3.31	13.55
Haridwar	36.44	19.04	15.46	11.26	1.29	16.28
Dehradun	25.5	17.87	19.06	20.67	3.31	13.55
Uttarakhand	27.92	19.29	19.52	16.24	1.53	15.38

(Source: UKHDR 2017)



Literacy Rate)

Literacy is critical to alleviating poverty, child mortality, fertility rates, gender justice, and sustainable development. Uttarakhand's literacy rate was 78.8% (Census,2011), which exceeded the national average of 74.04%. By 2017, the percentage had risen to 87.4% (UKHDR 2017), with 93.2% for men and 81.7% for women, indicating an 11.5% gender disparity. The adult literacy (15+ years) was 84.6%, with females having a 15-point deficit, which was more severe in rural areas (17.49-point gap) vs urban areas (9.59-point gap). Pithoragarh, Pauri Garhwal, and Bageshwar emerged as top-performing hill districts (adult literacy >87%), while Dehradun led the plains with 86.45%. Despite advances, rural-urban and gender inequities persist (Table 2).

Table.2 Adult (15+) Literacy Rate (%)

District	Male	Female	Total	Gender Gap
Uttarkashi	93.5	68.26	81.47	25.28
Tehri Garhwal	94.6	72.93	83.71	21.62
Rudraprayag	95.4	75.15	85.43	20.2
Pithoragarh	97	82.09	89.54	14.86
Nainital	91.6	81.87	86.91	9.74
Pauri Garhwal	96.9	79.2	87.89	17.69
Champawat	93.8	71.88	83.58	21.91
Chamoli	94.6	74.41	84.86	20.14
Bageshwar	96.3	77.62	87.29	18.7
Almora	93.4	75.22	84.69	18.22
U. S. Nagar	86.4	72.83	79.95	13.56
Haridwar	90	76.95	83.73	13
Dehradun	92	80.78	86.45	11.25
Uttarakhand	91.8	77	84.61	14.81

(Source: UKHDR 2017)

The Gross Enrolment Ratio

Regardless of age, the gross enrollment ratio determines the total number of students enrolled in a certain level of education as a proportion of the population of the same age for that level in a given year. Due to the inclusion of overage children, GER can be close to 100%. In Uttarakhand, when students continue their education, GER steadily declines. In 2015–16, GER dropped to 86.69% at the upper primary level from roughly 100% at the primary level. GER dropped marginally to 85.72% at the secondary level before plummeting sharply to 75.53% at the upper secondary level. GER has decreased from 89.88% to 86.69% at the upper primary level, despite being more age-appropriate at the elementary level. This decline highlights issues with both enrolment and retention of students in schools. Ensuring 100% enrolment, improving retention rates, and achieving educational milestones remain critical for advancing human development in Uttarakhand.

Out of School Children (Drop-out)

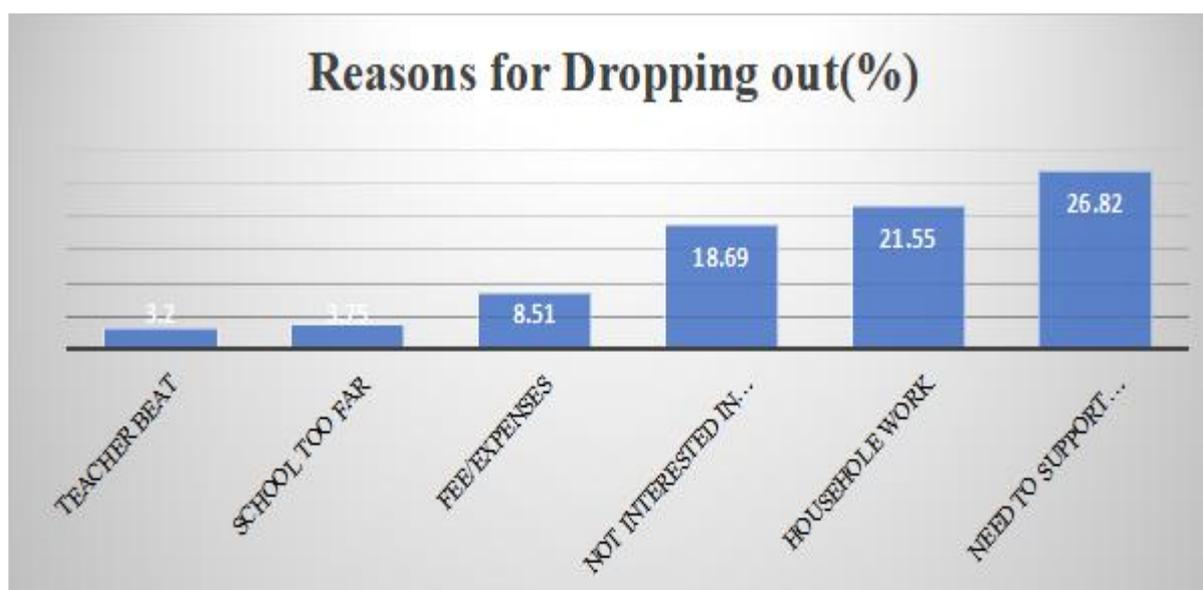
Among out of the school youngsters, 17.2 % never enrolled in school, while approximately 79 percent had dropped out at some point (Fig 2). A small percentage of students did not attend school, although



remaining registered. Approximately one-fifth of out-of-school Student (17.20 percent) had never attended school, with boys (20.44 percent) outnumbering girls (13.67 percent). The majority of out-of-school youngsters dropped out after enrolling, with girls having a little greater proportion (79.98 percent) than boys (78.31%). A small minority of out-of-school youngsters (1.41 percent) were enrolled but did not attend school.

The districts with the greatest dropout rates among out-of-school children were Chamoli (90.95 percent) in the hills and Dehradun (89.87 percent) in the plains. As previously stated, career possibilities on the plains may contribute to older children leaving school. A particularly alarming issue is the large percentage of children who have never attended school in hill districts like as , Tehri Garhwal, Rudraprayag, Almora, and Pauri Garhwal, calling into question the government's efforts to expand school access in these areas.

Figure. 2 Reasons for Dropping out



(Source: UKHDR2017)

Access to School

In mountainous regions, where it poses a major obstacle to children's education, particularly for girls, school accessibility is critical to enrollment, attendance, and retention. This problem is emphasized by the higher percentage of youngsters in hill districts who have never been enrolled. Only over one-third (35.83%) of homes in the hilly district of Almora have access to a school within a kilometre, compared to a far greater percentage in plains districts like Udham Singh Nagar (69.15 percent) and Haridwar (62.06%). Furthermore, more than one-third of Almora families (37.24 percent) stated that schools were between one and two kilometres away, 15.14 percent said that they were between two and four kilometres distant, and almost 10 percent said that they had to drive more than five kilometres to get to a school. This demonstrates unequivocally the difficulties families encounter in getting to schools in the state's hilly areas, which calls for targeted policy support.



Quality of Learning

In India, learning quality is poor, still a major problem, and Uttarakhand is no different. Nonetheless, according to recent official data, Uttarakhand's elementary school learning outcomes are often better than national average. According to the 2017 National Achievement Survey (NAS), which was carried out by NCERT, both boys and girls in Class 3rd outperformed the national average in both language and arithmetic. Children in Class 3rd in 34 states and union territories (UTs) correctly answered 64% of math questions and 68% of language-based questions at the all-India level. In Uttarakhand, Class III students successfully answered 67% of arithmetic questions and 72 percent of language questions. Additionally, the state's Class V students outperformed the national average. The ASER findings, which are based on surveys of rural households, emphasize that primary school students are still impacted by the quality deficit in spite of these encouraging figures. Of Class III students, just 34.5% were able to read a text at the Standard II level. Compared to government schools (24.7 percent), this percentage was substantially greater in private schools (43.3 percent). Just 64.6% of pupils could read a text at the Standard II level, even in Class V.

School Infrastructure

The Sarva Shiksha Abhiyan (SSA) has significantly improved school facilities in Uttarakhand, which is consistent with the national trend, according to the All India Education Survey (2017). There has been a notable improvement in indicators including the student-to-classroom ratio, drinking water availability, boundary walls, and cleanliness (Figure 6.17). Still, there is potential for improvement in areas like boundary walls, ramp access, and computer facilities. NCERT's 2017 Uttarakhand State Learning Report notes that despite these encouraging developments, 17% of educators said their schools lacked enough drinking water. Furthermore, 14 percent of teachers cited the shortage of electricity in schools, while 16 percent brought up the issue of restrooms. These infrastructure gaps need to be addressed to ensure the smooth operation of schools in the state.

Conclusion

Promoting education in Uttarakhand is challenging, with an adult literacy rate 84.62% and a gender gap of 15 points, highest in Uttarkashi District and lowest in Nainital District. Female literacy needs urgent attention to achieve SDG 4. The drop-in GER from secondary to higher secondary levels highlights issues of retention and transition to higher education. Policy efforts must focus on sustaining enrolment at higher levels. Pre-school education, crucial for cognitive development, sees less than half of children aged 3-6 attending pre-schools, with the highest attendance in Champawat District and the lowest in Haridwar. Gender disparities persist, with Almora and Dehradun reporting the lowest female enrolment. Anganwadi centres cater to over half of pre-primary students, emphasizing the need for more pre-primary facilities across the state. At higher levels, a shortage of secondary and higher secondary schools demands attention. More than half of elementary students attend private schools, with English as the medium of instruction being a key factor. Government



schools in the hills are preferred due to better infrastructure, quality teaching, and regular classes, while private schools dominate in the plains. Households spend an average of 10.7% on education, with the highest expenditures in Nainital and the lowest in Chamoli. To meet SDGs, Uttarakhand must strengthen infrastructure for higher education, expand vocational training, and promote involvement in secondary and tertiary education levels. Bridging disparities and addressing retention will be crucial for sustainable progress.

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