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Analysis of Educational Expenditure in Kathua District of Jammu and Kashmir

Jasbir Singh and Rahul Kundal***

ABSTRACT

Education has been a principle factor leading to development. It has the ability to enrich people's overall capacity to understand. It assists in securing socio-economic progress and an even distribution of income. A country may never develop sustainably in the absence of significant investment in human capital (Ozturk, 2001). Educational expenditure (presumed as investment in human capital) assists in development of skills in individuals. It helps in enhancing work abilities and, ultimately, production. It transforms the acquired capabilities into more developed (and efficient) ones and provides a set of freedoms to attain higher potentials among individuals. This research paper is an attempt to analyse educational expenditure of the sampled households in Kathua district of Jammu and Kashmir. Three hundred households were randomly selected and were surveyed by making use of an interview schedule. It was found that a large number of the sampled households were incurring, relatively, low educational expenditures. Pearson's (1900) chi-squared $(x^2=\sum_{i=1}^{k}\frac{(xi-mi)^2}{mi})$ *test was run, and it was found that educational expenditure incurred by the sampled households formed a large proportion of the total household expenditure.*

Key Words: human capital, educational expenditure, capabilities, set of freedoms, chi-squared test.

Introduction

Human Development is not about Economic Growth only

The first Human Development Report (HDR) (1990) of the United Nations Development Programme (UNDP) defines human development "as a process of enlarging people's choices". It includes important choices, such as "to lead a long and healthy life, to be educated, and to enjoy a decent standard of living" and some other choices such as "political freedom, guaranteed human rights, and self-respect". Previously, income had been considered a sufficient condition in exercising different human choices, but it proved to be partially correct for many reasons. For instance, income is only a means, but not an end. Well-being of people depends upon the income-use and not on the amount of income generated and accumulated. Evidences intend to explain that in certain cases, high level of human development is registered at normal income level, and vice-versa. There is no automatic link between human development and economic growth. The original definition of human development helps in distinguishing two aspects of human development: human capabilities' development and utilization of acquired human capabilities. As per the report, "people are the real wealth of a nation" and the objective of development is to yield a constructive environment for people in order to help them attain good health, longevity, and prosperity. However, repeatedly, well-being of people has been overlooked and focus turns towards wealth creation (and its accumulation).

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Measures to achieve human development have shown that the main objective of development is human well-being. Handsome standard of living, rise in education and health, productive work environment, cultural and socio-economic participation in community life, and provisions of security against crime enhance the quality of life. People may wish for higher incomes, but it is one choice that does not reflect the whole spectrum of human choices.

To understand insurance of people's well-being, one must understand the vitality of pillars of human development:

i. Equity: It reflects the idea of fairness for each individual with respect to right to education and health care.

ii. Sustainability: It explains that each individual is entitled with right to earn a living, and it embarks an even distribution of goods and services.

iii. Productivity: It makes provisions for overall participation of each individual in production process and income generation. It implies that authority must run effective social programs for people.

iv. Empowerment: It is about freedom that people possess in order to make an impact over developmental processes and decision-making, which leaves a mark over their lives.

v. Cooperation: It talks about participation and feeling of belongingness to society as a proponent of social meaning and collective enrichment.

vi. Security: It includes free, fair, and safe developmental opportunities to people so that they can feel confident and secure about not being disappeared in future.

If any of these pillars is/are missing, the true capabilities of a person may not be realized.

Education and Human Development

Education contributes vitally in development. It is seen that educational investment helps in raising level of human development, more importantly when these investments are made in primary education sector. This takes us to next level of imparting quality education. Ozturk (2001) has observed that education is amongst the primary determinants of development. No country can achieve higher levels of economic and human development without substantial investment in human capital. Education helps people to develop reasoning and understanding. It raises quality of life and results in numerous social benefits. It uplifts level of entrepreneurship and opens gates for technological advancement. It proves to be important in protecting socio-economic progress and enhancing income distribution. McGrath (2010) defines the role which education plays in development. He advocates that relationship between development and education has been considered important because education has always been a valued provider of development. This relationship is represented due to existence of some Millennium Development Goals (MDGs) on education. Education is important in planning and policy across the globe and it has promoted international competitiveness (and social inclusion). However, education is not a leading factor in enhancing developmental standards, though there are evidences of relationship between education and development. Tracking the role of education in human development, Türkkahraman (2012) has claimed that education improves the socio-economic lives of people, which may enhance well-being. It leaves a substantial impact on economic and social objectives and delivers high level of human progress.

Registering achievements in education and the role it performs in Indian human development process, Narayana (2006) enquires measurement of educational achievement and integrating

educational objectives, and set marks concerning human development. This enquiry creates incomparable measurement in educational achievement and indicators have reflected amalgamation of educational objectives at global, national, and sub-national levels. Policy implications formed out of such experiences have allowed other developing economies to look for directions in measuring educational achievement. Talking about relationship between education and development, Chatterji (2008) studies returns to education in India and has examined the role that education has performed on growth and development. He attempts to draw implications of outcomes of an empirical examination to develop sound educational policy. He concludes that female education is important. Due to emergence of externalities, primary education is quite important even when it has lower private rate of return. Savitha and David (2016) elate the fact that education is amongst the major determinants of Indian economic and human development, and it has driven growth, which is the primary focus of many developing economies. They illustrate relationship between development and education. They have tracked down importance of investment in education and human capital to achieve sustainable development. Developing economies have sought to focus completely on basic education while higher education has been neglected. Education systems that focus on human capital achieve higher level of economic growth and have been successful in eradicating poverty. They have suggested that policymakers should instrument policies for both basic education and higher education. This may yield benefits to the society and will positively influence development and growth.

Review of Literature

Arguing upon the impact of government's educational expenditure, Fan, Hazell, and Thorat (2000) discovered that it had a strong influence on poverty in rural India. Expenditure incurred by the government had huge potential in eradicating poverty, and it had also helped in observing rise in productivity. Public spending had led to decline in poverty. Similarly, Parida, Mohanty, and Raman (2015) found that huge marginal rise in government's educational expenditure had greater impact on human capital in rural India. With a rise in public expenditure, factors leading to accelerated economic growth were observed.

An inquiry carried out by Tilak (2002) claimed that there were important determinants deciding household educational expenditure in rural India. He said that there was nothing as such 'free' education in India. Households had to make significant amounts of educational expenditure. Despite differences in incomes of households, all incurred sizeable chunks of money on attaining education. Households made huge expenditure on school fees, uniforms, and books and stationeries. No discrimination, based on gender, was observed in context with educational expenditure. Lower-income earning groups incurred larger parts of their incomes on educational attainment than upper-income groups. Household and public expenditure did not substitute, but complemented each another. If household finances were to mobilize, government was to, significantly, raise spendings on education. Chandrasekhar and Mukhopadhyay (2006) assessed factors responsible for schooling decisions in rural India. They investigated impact of direct spendings, such as fees, and books and stationeries, etc., on primary schooling. It was clear that apart from tuition fee, there were other expenses, like expenses on uniforms, books, and transportation, which had to be incurred on children's schooling. They recognized the fact that there was an opportunity cost of educational attainment, which could have left negative impact on likelihood to attend schools. They advised that even if primary education were completely free in India, it would not have resulted in 100.0 per cent primary school attendance because many other factors, such as educational opportunity cost, gender, etc., were in play.

Dongre, Kapur, and Tewary (2014) found that, from 2007 to 2013, percentage of children in

private schools in rural India rose from 20.0 per cent to 29.0 per cent. In some states of India, around 70.0 per cent of the children in rural areas were in private schools. Households were not only making expenses on school fees, but also on coaching classes. 24.0 per cent of the children in these areas were undergoing private coaching classes. In Odisha, Bihar, and West Bengal, about 50.0 per cent of the rural children were attending private coaching classes.

Enquiring about rural household's educational expenditure and its impact on returns to education, Kambhampati (2008) talked about different types of households' educational expenditure for around ninety-nine thousand children (aged 5-14 years). It was found that some types of educational expenditure for around fifty-two thousand children was there while there was no educational expenditure for about forty-seven thousand children. While studying educational returns, he elaborated that scholarships were given to 9.0 per cent of the children while Mid-Day Meals (MDMs) were available to 19.0 per cent of the children. Free education was available to 79.0 per cent of the children. Therefore, educational returns proved to create a strong relationship with household's educational expenditure. He made concluding remarks by stating that that number of girls was higher than number of boys in the case of children who were not attending school.

Making use of household survey data of rural India, Tilak (2002) calculated elasticity coefficients and investigated about nature of household educational expenditure. There was a relation between public and household educational expenditure. Household expenditure blended favourably, but alteration in household income was larger than alteration in household expenditure. Rao (2014) interpreted household educational expenditure and discovered that rural households' reach to primary education was a costlier matter as it was for urban households. It was found that these households spent a lot at primary level. Rural poor were equally incurring expenses on education as rural rich. Bhattacharya (2009) explained that in 2004-05, there existed intra-state disparities concerning educational expenditure in UP, Bihar, MP, Chhattisgarh, Jharkhand, and West Bengal. There existed high potential of disparity with respect to monthly per capita household educational expenditure in these states. In rural areas, monthly per capita household's educational expenditure was much lower than urban areas. Proportion of educational expenditure in total household expenditure was nearly negligible in these areas, whereas it was significant in urban areas.

Kingdon (2005) investigated that gender bias with respect to allocation of educational resources, which took place in rural India, had compelled non-enrolment of female children at educational institutions. It led to zero educational expenditure by households. When educational expenditure was considered, there was insignificant level of gender bias amongst enrolled children. Preference for male child and investment motives were produced as factors responsible for significantly lower levels of educational resource allocation for female children than for male children. Chaudhuri and Roy (2006) explored areas of gender concerning educational expenditure on male and female children in rural India. They looked through intra-household allocation of educational expenditure and discovered that parents discriminated amongst their children on gender basis. Public safety-net programmes, such as MDMs, Integrated Child Development Scheme (ICDS), etc., were important in lowering gender bias. Females' high school and secondary school scholarships were of much importance in convincing households to get their female children enrolled in schools.

Objective

To analyse educational expenditure incurred by the sampled households in the study area.

Hypothesis

Educational expenditure forms a large proportion of the total household expenditure in the

study area.

Research Methodology

This research paper is based on primary data. However, research papers, government reports, internet sources, etc.,with respect to literature on human development and educational expenditure were also accessed in order to shape research design. For realizing the interrogative nature of this research paper, primary data were collected (method of primary data collection is explained later in this research paper).

Sampling Frame for carrying out Field Survey

Two blocks were selected purposively to form a sampling frame to carry out field survey. Twelve sampled villages from these blocks were also selected purposively. Twenty-five households were selected randomly from each village. Three hundred households from these villages were randomly selected and surveyed.

Sampling Technique

The following sampling technique was employed for this research paper:

Selection of Study Area

Two blocks, Kathua block and Barnoti block, were selected purposively. Among all the blocks of Kathua district, Kathua block and Barnoti block had the third highest and the first highest number of inhabited villages respectively. Twelve villages (six villages from each block) namely Patyari, Janglote, Sherpur, Changran, Basantpur, and Mehtabpur (Kathua block), and Palli, Nihalpur, Barwal, Jandore, Sumwan, and Nangal (Barnoti block) were also selected purposively. In each block, purposively selected villages were categorised into the following categories (of relative levels of development):

1. Villages with relatively high levels of development: Patyari and Janglote (Kathua block), and Barwal and Jandore (Barnoti block).
2. Villages with relatively medium levels of development: Changran and Sherpur (Kathua block), and Nihalpur and Palli (Barnoti block).
3. Villages with relatively low levels of development: Mehtabpur and Basantpur (Kathua block), and Sumwan and Nangal (Barnoti block).

It is worth mentioning that the relative levels of development of these villages were measured by making use of the data in Census of India (COI)-2011.

Selection of Households in Study Area

Three hundred households (one hundred and fifty households from each block and twenty-five sampled households from each village) were selected randomly through simple random sampling technique (lottery method) and surveyed.

Primary Data Handling

After the collection of primary data, these were analyzed through tabulation and simple percentage method. Pearson's chi-squared (χ^2) test was run for hypothesis testing.

Pearson's Chi-Squared (χ^2) Test

Pearson (1990), in a study on χ^2 test, enquired about of goodness of fita test. Assume 'n' number of observations are drawn by random sampling method out of a population are termed into 'k' mutually exclusive classes concerning observed numbers xi (i = 1,2,3,4,…,k) and null hypothesis (H0) yields probability 'pi' that an observation rests inside the ith class. Thus, there lies the expected

numbers 'mi' = 'npi' for every 'I', where in:

$$\sum_{i=1}^{k} pi = 1$$

$$\sum_{i=1}^{k} mi = n\sum_{i=1}^{k} pi = \sum_{i=1}^{k} xi$$

It was presumed that, under the conditions of H0 as correct, when n → ∞, the limitation of distribution of quantity given below is χ^2 distribution.

$$X^2 = \sum_{i=1}^{k} \frac{(xi - mi)^2}{mi} = \sum_{i=1}^{k} \frac{x^2 i}{mi} - n$$

Firstly, Karl attempted the case wherein expected numbers 'mi' were large known numbers in each cell supposing every 'xi' might be considered like distributed normally, and concluded that in limit 'n' became large, X^2 pursued χ^2 distribution with 'k 1' degrees of freedom (d.f.).

After that, Karl attempted the case in which values being expected relied upon measuring which was to be appraised out of the sample, and advised that, with 'mi' as correct expected values and 'm'I' as estimated expected values, subtraction followed

$$X^2 - X'^2 = \sum_{i=1}^{k} \frac{x_i^2}{mi} - \sum_{i=1}^{k} \frac{x_i^2}{m_i'}$$

would be normally direct, positive, and small enough to be excluded. In his concluding remarks, Karl argued that if X'2 was also being distributed as χ^2 distribution along with 'k 1' d.f., approximated error would not impact decisions on practical concerns.

An Overview of Educational Status of Members of the Sampled Households in the Study Area

Table 1 depicts data related to type of educational institution attended by members of the sampled households in the study area. Data reflect that a very large proportion (n=691, 56.6%) of members of the sampled households were attending or had attended educational institutions that funded by the government, and relatively a small proportion (n=225, 18.4%) of members of the sampled households were attending or had attended private educational institutions. 24.9 per cent (n=304) of members of the sampled households were not attending or had not attended any educational institutions.

Table 1

Type of Educational Institution attended by Members of the Sampled Households in the Study Area

Blocks	Public	Private	NA*	Total Members
Kathua	340 (57.4)	100 (16.8)	152 (25.6)	592
Barnoti	351 (55.8)	125 (19.9)	152 (24.2)	628
Total	691 (56.6)	225 (18.4)	304 (24.9)	1220

Notes: (i) *Includes illiterate members as well as children who were not yet admitted in schools.

(ii) Figures in parentheses are percentages, and these may not add up to 100 because of rounding off.

Source: Field survey.

Table 2 depicts data related to level of educational attainment of members of the sampled households in the study area. Data reflect that a considerable proportion (n=263, 21.5%) of members of the sampled households were educated up to upper primary level. A large proportion (n=525, 43.0%) of members of the sampled households were educated up to senior secondary level, and a small proportion (n=125, 10.2%) of members of the sampled households were educated up to tertiary level. 21.5 per cent (n=263) of members of the sampled households were non-literate.

Table 2

Level of Educational Attainment of Members of the Sampled Households in the Study Area

Blocks	Non-Literate	Up to Upper Primary Level (up to 7th Standard)	Up to Senior Secondary Level (up to 12th Standard)	Tertiary Level (Higher Education)	NA*	Total Members
Kathua	128 (21.6)	116 (19.5)	261 (44.0)	57 (9.6)	30 (5.0)	592
Barnoti	147 (23.4)	147 (23.4)	264 (42.0)	68 (10.8)	34 (5.4)	628
Total	263 (21.5)	263 (21.5)	525 (43.0)	125 (10.2)	64 (5.2)	1220

Notes: (i) *Children who were in school but had not attained any level of education as well as children who were not yet admitted in schools.

(ii) Figures in parentheses are percentages and these may not add up to 100 because of rounding off.

Source: Field survey.

Analysis of Educational Expenditure of the Sampled Households in the Study Area

Table 3 depicts data related to annual expenditure incurred on educational institution's tuition

fees by the sampled households in the study area (in ₹). It was found that a large proportion (n=140, 46.6%) of the sampled households were incurring relatively low annual expenditure on educational institution's tuition fees. Relative to these figures, a small proportion of the sampled households were incurring relatively medium and high annual expenditure on educational institution's tuition fees. A substantial proportion (n=77, 25.6%) of the sampled households were not incurring any annual expenditure on educational institution's tuition fees.

Table 3

Annual Expenditure incurredon Educational Institution's Tuition Fees by the Sampled Households in the Area Study (in ₹)

Blocks	₹ 0*	₹ 1 to ₹ 6000 (Relatively Low)	₹ 60001 to ₹ 12000 (Relatively Medium)	₹ 12001 and Above (Relatively High)	Total Sampled Households
Kathua	35 (23.3)	75 (50.0)	32 (21.3)	8 (5.3)	150
Barnoti	42 (28.0)	65 (43.3)	30 (20.0)	13 (8.6)	150
Total	77 (25.6)	140 (46.6)	62 (20.6)	21 (7.0)	300

Notes: (i) *Includes illiterate members as well as children who were not yet admitted in schools.

(ii) **Children who were in school but had not attained any level of education as well as children who were not yet admitted in schools.

(iii) Figures in parentheses are percentages, and these may not add up to 100 because of rounding off.

Source: Field survey.

Table 4 depicts data related to annual expenditure incurred on books by the sampled households in the study area (in ₹). It was found that a large proportion (n=138, 46.0%) of the sampled households were incurring relatively low annual expenditure on books. Relative to these figures, a small proportion of the sampled households were incurring relatively medium and high annual expenditure on books. A large proportion (n=122, 40.6%) of the sampled households were not incurring any annual expenditure on books.

Table 4

Annual Expenditure incurred on Books by the Sampled Households in the Study Area (in ₹)

Blocks	₹ 0*	₹ 1 to ₹ 4000 (Relatively Low)	₹ 4001 to ₹ 8000 (Relatively Medium)	₹ 8001 to ₹ 12000 (Relatively High)	Total Sampled Households
Kathua	65 (43.3)	67 (59.3)	16 (10.6)	2 (1.3)	150
Barnoti	57 (38.0)	71 (47.3)	16 (10.6)	2 (1.3)	150
Total	122 (40.6)	138 (46.0)	32 (10.6)	4 (1.3)	300

Notes: (i) *Sampled households, not even one of whose members was attending educational institutions as well as sampled households whose members received books either from schools or from other people free of cost.

(ii) Figures in parentheses are percentages, and these may not add up to 100 because of rounding off.

Source: Field survey.

Table 5 depicts data related to annual expenditure incurred on coaching classes by the sampled households in the study area (in ₹). It was found that a relatively small proportion (n=110, 36.6%) of the sampled households were incurring annual expenditure on coaching classes. 22.3 per cent (n=67) and 14.3 per cent (n=43) of the sampled households were incurring relatively low and high annual expenditure on coaching classes, respectively. A very large proportion (n=190, 63.3%) of the sampled households were not incurring any annual expenditure on coaching classes.

Table 5

Annual Expenditure incurred on Coaching Classes by the Sampled Households in the Study Area (in ₹)

Blocks	₹ 0*	₹ 1 to ₹ 4000 (Relatively Low)	₹ 4001 to ₹ 8000 (Relatively High)	Total Sampled Households
Kathua	97 (64.6)	27 (18.0)	26 (17.3)	150
Barnoti	93 (62.0)	40 (26.6)	17 (11.3)	150
Total	190 (63.3)	67 (22.3)	43 (14.3)	300

Notes: (i) *Sampled households, not even one of whose members was attending educational institutions as well as sampled households whose members did not attend coaching classes.

(ii) Figures in parentheses are percentages, and these may not add up to 100 because of rounding off.

Source: Field survey.

Table 6 depicts data related to annual expenditure incurred on transportation to reach educational institution by the sampled households in the study area (in ₹). It was found that a large proportion (n=118, 39.3%) of the sampled households were incurring relatively low annual expenditure on transportation to reach educational institution. Relative to these figures, an extremely small proportion of the sampled households were incurring relatively medium and high annual expenditure on transportation to reach educational institution. Almost half (n=149, 49.6%) of the sampled households were not incurring any annual expenditure on transportation to reach educational institution.

Table 6

Annual Expenditure incurred on Transportation to reach Educational Institution by the Sampled Households in the Study Area (in ₹)

Blocks	₹ 0*	₹ 1 to ₹ 4000 (Relatively Low)	₹ 4001 to ₹ 8000 (Relatively Medium)	₹ 8001 and Above (Relatively High)	Total Sampled Households
Kathua	59 (39.3)	75 (50.0)	16 (10.6)	--	150
Barnoti	90 (60.0)	43 (28.6)	16 (10.6)	1 (0.6)	150
Total	149 (49.6)	118 (39.3)	32 (10.6)	1 (0.3)	300

Notes: (i) *Sampled households, not even one of whose members was attending educational institutions as well as sampled households whose members walked to their respective educational institutions.

(ii) Figures in parentheses are percentages, and these may not add up to 100 because of rounding off.

Source: Field survey.

Table 7 depicts data related to annual expenditure incurred on miscellaneous educational expensesc by the sampled households in the study area (in ₹). It was found that an extremely large proportion (n=203, 67.7%) of the sampled households were incurring relatively low annual expenditure on miscellaneous educational expenses. Relative to these figures, an extremely small proportion of the sampled households were incurring relatively medium and high annual expenditure on miscellaneous educational expenses. A substantial proportion (n=77, 25.6%) of the sampled households were not incurring any annual expenditure on miscellaneous educational expenses.

Table 7

Annual Expenditure incurred on Miscellaneous Educational Expenses by the Sampled Households in the Study Area (in ₹)

Blocks	₹ 0*	₹ 1 to ₹ 2000 (Relatively Low)	₹ 2001 to ₹ 4000 (Relatively Medium)	₹ 4001 and Above (Relatively High)	Total Sampled Households
Kathua	35 (23.3)	104 (69.3)	9 (6.0)	2 (1.3)	150
Barnoti	42 (28.0)	99 (66.0)	9 (6.0)	--	150
Total	77 (25.6)	203 (67.7)	18 (6.0)	2 (0.6)	300

Notes: (i) *Sampled households, not even one of whose members was attending educational institutions.

(ii) Figures in parentheses are percentages, and these may not add up to 100 because of rounding off.

Source: Field survey.

Table 8 depicts data related to total annual expenditure incurred on education by the sampled households in the study area (in ₹). It was found that a considerable proportion (n=104, 34.6%) of the sampled households were incurring relatively low total annual expenditure on education. Relative to these figures, equally considerable proportion of the sampled households were incurring relatively medium and high total annual expenditure on education. A substantial proportion (n=78, 26.0%) of the sampled households were not incurring any total annual expenditure on education.

Table 8

Total Annual Expenditure incurred on Education by the Sampled Households in the Study Area (in ₹)

Blocks	₹ 0*	₹ 1 to ₹ 10000 (Relatively Low)	₹ 10001 to ₹ 20000 (Relatively Medium)	₹ 20001 and Above (Relatively High)	Total Sampled Households
Kathua	35 (23.3)	64 (42.6)	23 (15.3)	28 (18.6)	150
Barnoti	43 (28.6)	40 (26.6)	42 (28.0)	25 (16.6)	150
Total	78 (26.0)	104 (34.6)	65 (21.6)	53 (17.6)	300

Notes: (i) *Sampled households, not even one of whose members was attending educational institutions.

(ii) Figures in parentheses are percentages, and these may not add up to 100 because of rounding off.

Source: Field survey.

Testing of Hypothesis

In order to test the following null hypothesis against the alternate hypothesis, Pearson's $\chi 2$ test was run.

H0: Educational expenditure forms a large proportion of the total household expenditure in the study area.

HA: Educational expenditure does not form a large proportion of the total household expenditure in the study area.

Table 9

Observed values on Relative Scale on which Educational Expenditure formed the Proportion of Total Household Expenditure in the Study Area

Relative Scale	Observed Values		
	Kathua	Barnoti	Total Sampled Households
Small	43	46	89
Large	73	61	134
Total	116	107	223*

Note: *Total number of the sampled households in the study area that were incurring expenditure on education.

Source: Field survey.

Based on observed values, expected values were calculated (see table 10).

Table 10

Expected values on Relative Scale on which Educational Expenditure formed the Proportion of Total Household Expenditure in the Study Area

Relative Scale	Expected Values	
	Kathua	Barnoti
Small	46.29596	42.70404
Large	69.70404	64.29596

Source: Authors' calculation from observed values (see table 9).

With given critical value (c.v.) of 3.84 and degree of freedom (d.f.) 1, and calculated $\chi 2$ test statistics of 3.66, at 5 per cent (or 0.05) level of significance (α), it can be concluded that the null hypothesis is accepted while the alternate hypothesis is rejected because the test statistics calculated was smaller than c.v. It should, here, be noted that c.v. is obtained by making use of the d.f. and α. Moreover, it is c.v. that determines area of acceptance and rejection. In addition, when the test statistics calculated is less than the obtained c.v., the null hypothesis is accepted and when the test statistics calculated is more than the obtained c.v., the null hypothesis is rejected.

Conclusion

There are certain variables that determine household educational expenditure in rural India. There is no 'free' education. Rural households make considerable educational expenses. All households spend sizeable amounts of money on education. Low-income households spend larger parts of their incomes on educational attainment than high-income groups as public expenditure only complements and does not substitute household educational spendings (Tilak, 2002). Similar is the case of the sampled households in the study area. Most of these were low-income households, but a large proportion of their earnings had to be spent on education. Acceptance of the null hypothesis directs that educational expenditure formed a large proportion of the sampled household expenditure. Certain factors play an important role in decision-making regarding schooling in rural India. Moreover, there are a number of educational expenses, other than educational institution's tuition fees, such as expenses on books, stationery, transportation cost, uniforms, etc. There is an impact of direct spendings on primary schooling. There exists an opportunity cost of educational attainment, which may leave negative impact on likelihood to attend educational institutions (Chandrasekhar and Mukhopadhyay, 2006). In the study area, apart from educational institution's tuition fees, the sampled households incurred expenditure on books, coaching classes, transportation to reach educational institutions, miscellaneous goods and services (such as stationary items, hostel accommodation, educational tours and picnics, uniforms, etc.,). It was found that most of the sampled households were incurring relatively low educational expenditure because most of these households were low-income households. Prevalence of substantial rate of illiteracy and opportunity cost of attaining education in the study area also led to relatively low level of educational expenditure. However, it might be followed

that even the relative high level of educational expenditure in rural areas has been far low than the existing level of educational expenditure in semi-urban and urban areas.

Notes

a. It is the extent to which observed data match values that are expected by theory.

b. Expenditure incurred annually by the sampled households on coaching classes was calculated by multiplying number of months coaching classes attended over a year and monthly coaching fee.

c. Miscellaneous educational expenses included expenses on stationary items, hostel accommodation, educational tours and picnics, uniforms, etc.,

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