



# **THE GENDER DISPARITY IN HOUSEHOLD EXPENDITURE ON EDUCATION OF SCHOOL GOING CHILDREN IN JHARKHAND: EVIDENCE FROM CHATRA DISTRICT**

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*This paper attempts to explore the gender disparity in household expenditure on education of school going children (class I to Xth) in Chatra District of Jharkhand. The study was based on the primary data. For this study multistage random sampling technique was applied for selecting the samples and the total samples size was 210 (SC 31, ST 55 and Others 124). The schedule method was used for data collection and it was administered through predesigned questionnaire. The descriptive statistic like average and average difference and inferential statistical tool like Z-test and t-test at 5 % level of significance were applied. The results of the study revealed that no gender disparity exists across the social groups (SC, ST and Others) on education expenditure of children but the study found that gender disparity exists where children are studying in private school in the study area as a whole (Chatra District). The study also found that gender disparity in education expenditure of children with higher level of household income in the study area as a whole and across the Others' social group.*

**Key words:** Gender Disparity, Household Expenditure, Education Expenditure

## **INTRODUCTION**

The concept of gender is a socially constructed difference between men and women, boys and girls on the basis of social norms, activities, relationship, responsibilities and their physical strength (WHO 2010). Whereas the gender disparity between male and female is a process of unequal treatment towards economic and social opportunities, access to education and health treatment, occupational access to formal employment, political representation and bargaining power inside the household (WDR 2012). The gender disparity in education is the process as well as an outcome of the process where male and female children are treated unequally in access to education. In this study gender disparity in household expenditure on education has been treated as an outcome and measured as the difference between education expenditure on boys (expenditure on boys minus expenditure on girls) and education expenditure on girls. The aim of this paper is to examine the gender disparity in household expenditure on education of children, studying from class I to X.

It is true that the education is the most important factor for the development of human capital. In the initial stage of economic development, primary education is more important than higher education. It is necessary that there must be equal access to education for both male and female children for the holistic and rapid growth of human capital. Mostly, developing countries have large gender gap in education due to the prevalence of male child preference, religious barriers and some socio-cultural norms which act as a constraint for female children's education (B.G. Tilak 2002). Education of girl is much more important, so far as the social benefit of education is concerned because girls will be the

future mother as whom the development of depends. Therefore, it is necessary to eliminate the gender disparity right from childhood by means of allocating resources equally for both genders.

The present study is an attempt to examine whether gender disparity in allocating resources for education expenditure prevails in the sampled household (n=210), hence it is crucial to know about the factors (or determinants) causing gender disparity.

### **Literature on Causes and Determinant of Gender Disparity**

Regarding household expenditure on children's education, Quayes S. Ramsey R. D. (2015) found that household income and parent's education are main determinant of gender disparity in Pakistan. Jandhyala, B.G. Tilak's study (2002) found that education of household head, size of the family, caste and social norms are the main determinants of gender disparity in education expenditure in India. Rosenzweig and Schultz's (1982) found that the households allocate resources to children's education on the basis of expected earnings from children when they will become adults. Shiva kumar M. (2008) in his study found, large gender gap in education expenditure due to cultural norms, where parents spend more on son's education because he will remain a part of the family whereas girls will leave parents' home after marriage. Phuntshu Choden (2012) found a significant gender gap in schooling among children aged between six to sixteen in Bhutan. In the study of Shaleen Khanal (2018) it was found that gender of children is the main cause of gender disparity in education expenditure because parents spend more on boy's education as compared to the girls in both urban and rural areas of Nepal. S. Sundari's (2015) study found expenditure on girl's education at primary and secondary level was to be less as compared to boy's education. The study also found gender disparity in household expenditure on education in both male headed and female-headed household in rural and urban areas of Tamil Nadu. Tanvi Bhatkal's (2012) study found that in Andhra Pradesh, greater gender disparity in education expenditure exists, where children are studying in private school but not in government school. G. Blatchandirane's 2004 study found that there is positive relationship between children education and mother's education because women are able to utilize resources in balanced way among the children. Jensen R. (2002) detect that household spends less on education expenditure on girls, if she belong to large size of family and have more siblings.

On the basis of above studies, the present paper identified the following determinants of gender disparity. These are as follows, gender (male and female child), type of household (Nuclear and Joint), gender of household head (Male and Female headed), type of school (Private and Government), level of education (class I to X), level of mother's education and level of household income. The education expenditure was computed as annual average expenditure on the following components like expenditure on monthly school fees, stationary, books, dress, transportation cost and pocket expenditure.

### **OBJECTIVE OF THIS STUDY**

The objective of this study is to explore the gender disparity in household expenditure on education among school going children (from class I to X) in the study area as a whole (n=210) and across the social groups (ST, SC and "others").

### **RESEARCH HYPOTHESES**

To test, whether gender disparity exists in household expenditure on education among school going children in the study area as whole and across the social groups, following hypotheses were formulated:

- (i)  $H_0$ : There is no gender disparity in household expenditure on education among the children in the study area as whole.
- (ii)  $H_0$ : There is no gender disparity in household expenditure on education among SC children.
- (iii)  $H_0$ : There is no gender disparity in household expenditure on education among ST children.
- (iv)  $H_0$ : There is no gender disparity in household expenditure on education among "others" social group children.

## **METHODOLOGY**

This paper was based on the primary data, which was collected during January 2018 to July 2018. The total samples size is 210. The sample size of SC, ST and "others" social groups are 31, 55 and 124 respectively on the basis of Jharkhand population composition (Census 2011), where ST comprises 26.3%, SC 11.8% and others 62 %. The subject (mothers of children) of this study was selected through the multistage stratified random sampling method. In this study only those mothers were selected, who having both male female children. Chatra district has two sub-division, Simaria and Chatra. In the first stage, two blocks were selected randomly from each sub-division of chatra district. In the first stage Simaria and Tandwa block were selected from Simaria sub-division and Chatra and Itkhor block were selected from Chatra Sub-division and in the second stage, two panchayats were selected randomly from each selected block (Dhangada, Dhahu, Banasadi, Dadi, Sima, Damdoia, Pitij and Shaharjam). After that, two villages were selected randomly from each selected panchayat and the household list of selected villages was obtained. From the sampled household, one respondent, that is mother of children was selected because mothers look after the education of their children. So far as education level of selected children's mothers is concerned in the study area 50% are illiterate, 19.04% with class I to V, 22.38% with class VI to Xth and 8.57% with above the Xth. The schedule method was used for data collection and it was administered through predesigned questionnaire, which consist, 51 questions related to the research question and hypotheses. Among the 210 household, 30% belong to female headed household and 70% was male headed household. While 18 % household belongs to joint household and 82% belong to nuclear household. The total number of boys and girls are 311 and 310 respectively. Out of 311 boys, 33% were studying in private school and 67% in government school whereas out of 310 girls 31% were studying in private school and 69% in government school.

For descriptive statistic, tools like average and average difference and inferential like  $Z$  test and  $t$  test at 5% level of significance were carried out. The descriptive result of gender disparity was measured by taking difference between education expenditure on boys minus education expenditure on girls.

## **FINDINGS AND DISCUSSION**

Gender (male and female child), type of household (Nuclear and Joint), gender of household head (Male and Female headed), type of school (Government and Private), level of education (class I to V and VI to X), level of mother's education and level of household income are taken as determinants of gender disparity. Allocation of household expenditure on education by gender and others determinants are computed on basis of data. The results of the study are tabulated below.

**Table No: 1- Gender Disparity in Household Expenditure on Education Caused Different Explanatory Variables, in the Study Area as a Whole (n=210)(z\_critical at  $\alpha=0.05$ ,  $\pm 1.96$ )**

Gender Disparity by	Boys (Rs.)	Girls (Rs.)	Mean Difference (boys-girls)	Z_cal	Test of statistical significance based on Z-test ( $\alpha=0.05$ )
Gender	5733.59	5440.76	292.83	0.77	Not significant
Joint household	5532.86	5743.26	-210.41	-0.25	do
Nuclear household	5784.59	5372.61	411.98	0.99	do
Female household head	5321.16	5194.86	126.29	0.2	do
Male household head	5914.99	5549.41	365.58	0.77	do
Government schools	3036.5	3578.58	-542.09	-2.29	Statistically significant
Private schools	11025.05	9655.17	1369.88	2.02	Statistically significant
Class (1-5)	5297.33	4392.96	904.38	1.8	Not significant
Class (6-10)	6530.76	6664.42	-133.66	-0.24	Not significant
Gender disparity in education by level of mother's education					
Illiterate	4775.52	4501.98	273.53	0.62	Not Significant
I to V	5817.03	5194.28	622.75	0.88	Not Significant
VI to X	6639.66	6589.23	50.43	0.05	Not Significant
above X	9268.89	9540.65	-271.76	-0.15	Not Significant
3600-10000	3920.04	4310.03	-389.98	-1.21	Not significant
10001-35000	8154.7	7331.61	823.08	1.05	Not significant
35001-60000	13548.75	7059.09	6489.66	4.43	Statistically significant

Source: Compiled from Survey Data

In the study area as a whole, gender disparity in education expenditure was found between boys and girls (class I to X), in nuclear household, gender of the household head (both male and female), children studying in private school, studying in class I to V, mothers' education at all level (excluding above Xth), and with all household income groups excluding lower income group (below 10000).

As far as the gender of the children is concerned, household spent more on boy's education (Rs. 5733.59) than that of girls (Rs. 5440.76) and the gender disparity was found to be Rs. 292.83. For the types of household concerned, result revealed that expenditure on boy's education (Rs. 5784.59) is greater than girl's education (Rs. 5372.61) in nuclear household, a gender disparity of Rs. 411.98. As per the gender of the household head, (both male and female headed) data showed that expenditure on education of boys exceeded that of girls. Greater gender disparity was found in male headed household (Rs. 365.58) as compared to the female headed (Rs. 126.29). Two types of school (government and private) were taken into account for this study, and result showed that for children studying in private school, parent spent more on boys (Rs. 11025.05 as compared to girls (Rs. 9655.17), which revealed a gender disparity of Rs. 1369.88. As far as level of education is concerned (class I to V



and VI to X) gender disparity was found in the level of education for class I to V, of Rs. 904.37.

Moreover, for the mother's education level, the descriptive results revealed that household spent more on boy's education as compared to the girls. In case of illiterate mothers and mothers with education level from class I to X, the gender disparity was of Rs. 273.53 in case of illiterate mothers and Rs. 622.75 for mothers whose education level was class I to V, but at higher level (VI to X) low (Rs. 50.43) disparity was found. Thus, more gender disparity was found at low level of education of mothers and no gender disparity was found where mother's education is above Xth. As far as household income is concerned, the result showed that the gender disparity exists in education expenditure with income groups of 10001 to 35000 and 35001 to 60000, a expenditure disparity on education of Rs. 823.08 and Rs. 6489.66 respectively in the study area as a whole (Chatra District). There was no gender disparity with income of below 10000.

**Table No: 2- Gender Disparity in Household Expenditure on Education Caused by Different Explanatory Variables Across the SC Social Group (n=31)**

Gender Disparity by	Boys (Rs.)	Girls (Rs.)	Gender Disparity (Rs.)	t_cal	t -Crtl	Test of statistical significance based on t-test (?=0.05)
Gender	3649.62	4292.5	-642.88	-0.7	-1.99	Not significant
Joint households	2544	4052	-1508	-1.34	-2.18	Not significant
Nuclear household	3995.13	4363.24	-368.11	-0.32	-2	Not significant
Female household head	6050	5481.58	568.42	0.28	2.03	Not significant
Male household head	2172.46	3388.8	-1216.34	-2.17	-2.03	significant
Private school	13944	11906	2038	0.55	-2.31	Not significant
Government school	2258.49	3316.41	-1057.92	-2.23	-2	Significant
Class 1-5)	2829.78	2838.4	-8.62	-0.01	-2.01	Not significant
Class 6-10)	5125.33	6205.79	-1080.46	-0.66	-2.04	Not significant
Gender disparity in education by level of mother's education						
Illiterate	2827.72	3382.07	-554.35	-0.68	-2	Not significant
literate	5483.08	6052.67	-569.59	-0.26	-2.06	Not significant
Gender disparity in education by level of household income						
3600-9000	4424.96	4847.2	-422.24	-0.41	-2.01	Not significant
9001-14000	2580	4985.56	-2405.56	-1.88	-2.23	do
14001-19000	8782.5	7574	1208.5	0.37	2.12	do

Source: Compiled from Survey Data

To test whether the gender disparity in household expenditure on education of school going children is significant, Z-test at 5% level of significance was carried out. It was found that children's studying in private school is a significant variable [ $Z_{cal} (2.02) > Z_{crit} (1.96)$ ] causing gender disparity. It was also found that high income of household (35001-60000) to be a significant variable [ $Z_{cal} (4.43) >$

$Z_{crit}(1.96)$ ], causing gender disparity in education expenditure in the study area as a whole. But the study found that level of mother's education was not a significant variable for causing gender disparity in the study area as a whole.

### Gender Disparity Across the Social Groups

The gender disparity in household expenditure on education of school going children across the social groups (SC, ST & "others") in the study area (Chatra District) is discussed below.

In the SC social group, gender disparity was found in case of female headed household, children studying in private school, and household with income groups of 14001-19000.

Within the SC social group, female headed household spent more on boy's education (Rs. 6050) as compared to the girl's education (5481.58), a gender disparity of Rs. 568.42. As per expenditure in private school, education expenditure on boys (Rs. 139440) is greater than that on girls (Rs. 11906) and the gender disparity is Rs. 2038. Whereas a gender disparity of Rs. 1208.5 was seen with income group of 14001- 1900,

To test for the significance of the gender disparity in household expenditure on education of school going children, t-test at 5 % level of significant was carried out. It was found that no single variable was of significance for the gender disparity across the SC social group.

**Table No: 3- Gender Disparity in Household Expenditure on Education is Caused by Different Explanatory Variables Across the ST Social Group (n=55)**

Gender Disparity by	Boys (Rs.)	Girls (Rs.)	Gender Disparity (Rs.)	t_cal	t_Crtl	Test of statistical significance based on t-test ( $\alpha=0.05$ )
Gender	4010.47	4593.19	-582.73	-1.11	-1.973	Not significant
Joint household	2886.25	3825.45	-939.2	-0.653	-2.131	Not significant
Nuclear household	4267.43	4694.94	-427.51	-0.745	-1.976	do
Male headed household	4111.83	4642.06	-530.23	-0.753	-1.979	do
Female headed household	3776.54	4465.38	-688.85	-1.212	-2.009	do
Private schools	13695	10923.75	2771.25	0.956	2.179	do
Government schools	3284.13	4004.3	-720.18	-1.992	-1.975	Significant
Class I to V	3530.35	3533.53	-3.18	-0.005	-1.983	do
Class VI to X	4954.14	5850	-895.86	-1.357	-1.995	do
Gender disparity in education by level of mother's education						
Illiterate	3655.41	4229.56	-574.15	-0.99	-1.98	Not significant
literate	4876.8	5544.23	-667.43	-0.6	-2.01	Not significant
Gender disparity in education by level of household income						
3600-5000	3390.67	3256	134.67	0.13	2.07	Not significant
5001-10000	3590.56	4463.08	-872.52	-1.81	-1.98	Not significant
10001-25000	5891.18	6630	-738.82	-0.35	-2.05	Not significant

Source: Compiled from Survey Data

The results revealed that gender disparity was found where children are studying in private school, and in the household income group of 3600-5000.

As per private school is concerned, education expenditure on boys (Rs. 13695) is greater than that of girls (Rs. 10923.75), a gender disparity of Rs. 2771.25. In case of level of household income, the study found low gender disparity (Rs. 134.67) in education expenditure with household income of below 5000 but this disparity was not found in higher level of household income.

To test, whether the gender disparity exists in household expenditure on education of school going children, t-test at 5 % level of significance was carried out. It showed that no single explanatory variable was significant for causing the gender disparity across the ST social group.

**Table No: 4- Gender Disparity in Household Expenditure on Education is Caused by Different Explanatory Variables Across the “Others” Social Group (n=124)**

Gender Disparity by	Boys (Rs.)	Girls (Rs.)	Gender Disparity (Rs.)	t_cal	t_Crtl	Test of statistical significance based on t-test (a=0.05)
Gender	7021.66	6197.71	823.95	1.528	1.967	Not Significant
Joint household	7485.14	6781.24	703.89	0.617	1.993	do
Nuclear household	6904.21	6037.78	866.43	1.406	1.969	do
Female household head	5858.87	4401.9	1456.99	1.891	1.986	do
Male household head	7495.72	6954.6	541.09	0.793	1.97	do
Private schools	10756.45	9490.72	1265.73	1.805	1.974	do
Government schools	3162.38	3197.41	-35.03	-0.093	1.974	do
Class (I to V)	6727.61	5303.85	1423.76	1.961	1.971	do
Class(VI to X)	7542.94	7225.65	317.29	0.414	1.977	do
Gender disparity in education by level of mother's education						
Illiterate	6533.44	5252.01	1281.42	1.72	1.98	Not significant
Class I to V	6167.18	5606.9	560.28	0.56	2	Not significant
Class VI to X	7106.46	6535	571.46	0.53	1.98	Not significant
Above X	9578.4	9296.9	281.5	0.14	2.02	Not significant
Gender disparity in education by level of household income						
3600-10000	4760.16	4563.87	196.29	0.35	1.97	Not Significant
10001-35000	9162.87	7757.28	1405.59	1.7	1.97	Not Significant
35001-60000	13331.67	6829	6502.67	3.57	2.14	significant

Source: Compiled from Survey Data

Across the "others" social group, gender disparity in education expenditure was found in these variables: gender of children, type of household (Nuclear and Joint), gender of household head (both male and female), children studying in private school, and in class I to V and VI to X, all levels of mother's education (illiterate, class I to X and above X), and all level of household income (above 3600).

As per gender of children (male and female child) is concerned, household spent more on boy's education (Rs. 7021.66) as compared to the girls (Rs. 6197.71), a gender disparity of Rs. 823.95 was found. For the types of household concerned, the result revealed that education expenditure on boys is greater than girls in both nuclear and joint household. The gender disparity in education expenditure was greater in case of nuclear household (Rs. 866.43) as compared to joint household (Rs. 703.89). Both male headed and female headed household spent more on boys than that on girls, whereas greater gender disparity in education expenditure was found in case of female headed household (Rs. 1456.99) than that of male headed household (Rs. 541.09). In case of children studying in private school, gender disparity in education expenditure was found to be Rs. 1265.73. Moreover, for level of mother's education, the study found that gender disparity in education expenditure exists for all level of mother's education. But, in case of illiterate mothers, greater gender disparity was found (Rs. 1281.42) as compared to the mothers whose level of education was from class VI to X (Rs. 571.46), class I to V (Rs. 560.28), and above Xth (Rs. 281.5). Thus, it may be concluded that as the level of mother's education increases, the gap of gender disparity in education expenditure is eliminated in the "others" social group. The gender disparity in education expenditure was also found in case of all income groups of household in the "others" social group. However, greater gender disparity in education expenditure was found with level of household income group of 35001 to 60000 (Rs. 6502.67) as compared to the income group of 10001 to 3500 (Rs. 1405.59) and 3600-10000 (Rs. 196.29). Hence, the result showed that as household income increases, the gap of gender disparity in education expenditure increases.

To examine the gender disparity in household expenditure on education of school going children across the "others" social group, t-test at 5% level of significance was carried out. It was found that higher income (35001 to 60000) was a significant variable [ $t_{cal} (3.57) > t_{crit} (2.14)$ ] for causing gender disparity in education across the "others" social group.

The study also incorporated socio- cultural norms as a determinant of gender disparity in the study area and across the social groups. The findings are as follows.

**Table No: 5- Examined Socio-cultural Norms in the Study Area as Whole and Across the Social Groups**

Sr. No.	Socio Cultural Norms	As a whole (n= 124)		SC (n= 31)		ST (n= 55)		Others (n= 124)	
		Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %
1	Against in Dowry system	92.86	7.14	96.77	3.23	98.18	1.82	89.52	10.48
2	Favour at least one boys in HH	92.86	7.14	93.55	6.45	88.27	11.73	95.97	4.03
3	Son provide Social & economic security	89.52	10.48	93.55	6.45	92.73	7.27	87.1	12.9
4	Girls is economic burden of HH	56.19	43.81	74.19	25.81	14.55	85.45	70.16	29.84
5	Against of early marriage of girls	98.57	1.43	96.77	3.23	98.18	1.82	100	0

Source: Compiled from Survey Data

This study also takes into account socio-cultural norms as determinant of gender disparity in household expenditure on education of school going children in the study area as a whole and across the social groups. There are five socio-cultural norms included in the questionnaire and to access gender disparity in attitudes, perceptions, opinion etc.

The results revealed that in the study area 92.86 % are against the dowry system, 92.86 % wants at least one boys in the family (son preference), 89.52 % considered that only son may provide social and economic security of family, 56.19 % believe that girls is economic burden of family and 98.57 % are against the early marriage of girls. Hence, in the study areas son preference (92.86%) prevailed in the society therefore gender disparity in education expenditure was found in children studying in private school and in higher income of household (above 35000). It is apparent that existing of socio-cultural norms (preference of son, son provide social and economic security of family and girls is economic burden of family) is an influencing factor of gender disparity in education expenditure in the study area as a whole, but in case of ST and SC social groups gender disparity in education was not found. So far as socio-cultural norms are taken into account whereas gender disparity was found in the "others" social group with higher income group household.

## **CONCLUSION**

Gender disparity was found for children studying in private school in the study area as a whole but was not found across the social groups. The study also found increasing gender disparity in education expenditure with increasing level of household income (35001 to 60000) in the study area as a whole and across the "others" social group. Other factors like gender of children when considered from class I to X, level of mother's education, gender of household head and type of household (nuclear or joint) showed no significant gender disparity in education expenditure across the population studied. Gender disparity in household expenditure on education is not a good sign for the future our country because girl will comprise half the workforce and their role is paramount as mother of future generations. To keep the girl child backwards is to keep half the country backwards. To eliminate the gender disparity in expenditure on girl's education a greater awareness on the need of girl's education is needed at the household level. School for girls should be safe and easily accessible. Women's employment should be incentivized so that educated women can get suitable employment and are able to overcome hurdles in employment to become valuable contributors to the family income. Thus, households will give equal attention to the education of girls as of boys. Also, government should intervene to provide better quality education in government school, sufficient infrastructure like all weather classrooms, drinking water and toilet facilities so parents feel confident to send their children to study in government school.

## **REFERENCES**

- Cristian C. Popescu, Laura Diaconu (2009), "The relationship between the level of education and the development stage of a country." <https://www.researchgate.net/publication/41394832>. (20/03/19).
- Francis X. Hezel, SJ (1974), "Recent Theories of the Relationship between Education and Development" <http://www.micsem.org/pubs/articles/education/frames/rectheorfr.htm>. (15/01/2017).
- Harmon, C., Oosterbeek, H., Walker, I. (2000), "The Returns to Education. A Review of Evidence, Issues and Deficiencies in the Literature", Discussion Papers 0005, Centre for the Economics of

- Education, LSE. <https://ideas.repec.org/p/cep/ceedps/0005.html>. (21/01/2019).
- Jandhyala, B.G. Tilak's study (2002), "Education and poverty", journal of human development, vol-3, issueno-2, Page No- 191-207, <https://www.tandfonline.com/doi/abs/10.1080/14649880220147301> (02/02/2016).
- Jensen, R. 2002. "Equal Treatment, Unequal Outcomes? Generating Gender Inequality Through Fertility Behavior". Unpublished manuscript, John F. Kennedy School of Government, Harvard University. <https://www.cpc.unc.edu/projects/china/publications/127>. (16/04/19)
- Lange, F., Topel, R., "The Social Value of Education and Human Capital, Amsterdam: Handbook of Education Economics", 2005.
- Mark R. Rosenzweig, and T. Paul Schultz (1982) The Behavior of Mothers as Inputs to Child Health: The Determinants of Birth Weight, Gestation, and Rate of Fetal Growth, University of Chicago Press, editor (p. 53 - 92), the National Bureau of Economic Research, <https://www.nber.org/chapters/c6545>. (02/02/2016).
- Marimuthu Sivakumar (2008), "Gender Discrimination and Women's Development in India", MPRA Paper No. 10901, <https://mpra.ub.uni-muenchen.de/10901>. (20/02/2016).
- Phuntshu Choden (2012) "Gender gap in household investment: a study on Bhutan", Research thesis, Queensland University of Technology. <https://eprints.qut.edu.au/52725/>. (20/05/2016).
- Quayes, S., Ramsey, R.D. (2015) "Gender Disparity in Education Enrollment in Pakistan", Asian Economic and Financial Review 5:3 pp. 407-417, [www.conscientiabeam.com](http://www.conscientiabeam.com) (10/01/2016)
- Robert J. Barro and Xavier Sala-i-Martin (1995), "Economic Growth", Journal of Economic Dynamics and Control, Elsevier, vol. 21(4-5), pages 895-898, May. <https://ideas.repec.org/a/eee/dyncon/v21y1997i4-5p895-898.html> (10/04/2019).
- Sianesi, B., Van Reenen, J. (2003) "The Returns to Education: A Review of Macro-Economic Literature", Centre for the Economics and Education, LSE, 2000. World Bank, The East Asian Miracle, Oxford University Press, (18/01/2018).
- Sundari S. (2015) "Gender Bias in Household Expenditure on Education: A Study in Tamil Nadu", <http://journals.sagepub.com/doi/pdf/10.1177/0973703020150204>, (25/03/2019)
- Khanal Shaleen (2018) "Gender Discrimination in Education Expenditure in Nepal: Evidence from Living Standards Surveys", [https://www.mitpressjournals.org/doi/pdf/10.1162/adev\\_a\\_00109](https://www.mitpressjournals.org/doi/pdf/10.1162/adev_a_00109). (08/02/2019)
- Bhatkal Tanvi (2012) "Gender Bias in the Allocation of Education Expenditure: Evidence from Andhra Pradesh, India", <https://assets.publishing.service.gov.uk/media/57a08aa840f0b649740006e0/gender-bias-in-the-allocation-of-education-expenditure.pdf>. (10/01/2018)
- World Bank Report (2003), "The East Asian Miracle, Economic Growth and Public Policy", Oxford University Press, <http://documents.worldbank.org/curated/en/975081468244550798/pdf/multi-page.pdf> (20/03/19).
- WHO (2010), [www.who.int/dg/speeches/2010/keynote\\_health\\_financing\\_20101122/en/](http://www.who.int/dg/speeches/2010/keynote_health_financing_20101122/en/) (22/03/2016)