

Mitigating the poverty trap by reinventing donation as an investment plan in the educational needs of underprivileged children.

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Abstract

Underpinned by the research works on private returns on education in developing nations that have found a positive correlation between earning and subsequent level of schooling, this paper presents a concept of an investment policy which will help the impoverished children in becoming economically successful through systematic funding of their educational needs with an obligation of interest adjusted returns.

Keywords: Poverty; Education; Economic Policy; Social Welfare; Investment

1. Introduction

The perennality of poverty has disguised it as a benign social condition, when, in reality, it is an economic menace that hinders the overall national development. As poverty leads to the inaccessibility of education, nutrition, and wellness, it hampers development in children (Patrice AND Maureen, 2005 [1]) and ultimately creates human resources with inferior capability that adds to the national liability. While formal education can emancipate one out of the state of deprivation (Bruce Weber et al., 2007 [2]), the world is still struggling to eradicate chronic poverty.

Helping the poor has always been perceived as social welfare rather than an economic necessity. Most of the prevalent model for helping the poor is, in some way or the other, donation based. This altruistic system helps the poor achieve immediate survival goals like food availability and night shelter, but it fails in their ultimate liberation from the mire of penury. As the world economy stands on the principle of exchanging values produced through some form of labor, the poverty eradication model should aim to generate opportunities for one to work and produce value. Though many models, like MNEREGA in India, give work opportunities, they are mostly for the low-paying job, which can barely let actual economic well-being.

Donation is the most chosen option to help the poor because of unavailability for any other easy alternate. The two flaws with donation are its incapability to eliminate the root cause of poverty, and it produces no economic value for the donor. This paper talks about a novel

way that reimagines the solution of helping the poor as a long term investment policy with pecuniary benefits for both sides.

2. Education in India.

The strong correlation between education and earnings has been well studied. Several research works have concluded that the impact of education on economic growth cannot be gainsaid (Psacharopoulos & Patrinos, 2004 [3]). Inaccessibility of good quality primary, secondary, and higher education to many underprivileged children renders them incapable of decent-paying work at a later stage of life. In the most underdeveloped and developing countries, despite enacted laws for mandatory education, the percentage of poor children who receive formal education at school is abysmally low compared to developed countries (De and Mehra, UNESCO [4]). Lack of confidence in education quality in government-aided primary schools and the onus to earn money from an early age are the primary reasons for forswearing education.

As per the Indian Census 2011 data [5], out of the total under 18 population of 427 million, 99 million children are out of school. A third of non-school going children are forced to earn a livelihood. As per the District Information System for Education, 2014-15 [6], 68% of children do not finish education timely. Knoema education statistics data [7] for 2015 found that the Gross Enrolment Ratio (GER) in primary education in India drops from 109 % in primary to 27% in tertiary education. India's GER for secondary and higher education is lesser than that of developed nations. (Fig. 1)

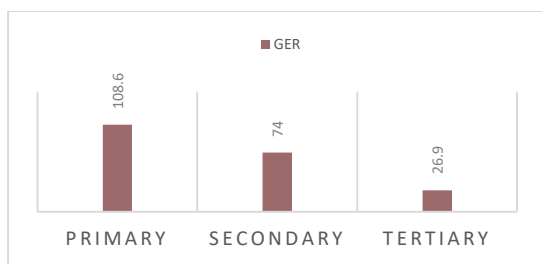


Figure 1: Gross Enrollment Ratio across different levels of education in India.

Source: Knoema Data on Education Statistics.

3. Rate of Returns on Education in India (Gounden et al., 1967 [8]) notably stated that it is economically profitable to invest in India's education. Earlier work on return on education in India, between the years 1950-1990, suggested that return on education was highest for primary education, and it decreases for subsequent levels. Some notable work in India's first 50 years of independence is from (Tilak, 1987 [9]) and (Blaug, 1972 [10]). This pattern has, however, changed, with a recent study suggesting a higher return with increasing educational level – (Kigndon and Calclough, 2010 [11])

(Mitra, 2019 [12]), in their recent work, it has calculated the rate of return across several disaggregation using the data of NSSO 2011-12 [13] using quantile regression. The result at the All India level is given in Table 1.

Table 1: Return on education at all India level for different wage quantile

Wage Quantile	0.1	0.25	0.5	0.75	0.9
Elementary	1.25	1.5	2.63	2.88	3.63
Secondary	7.5	6.5	5.5	6.5	5
Higher secondary	5	2	3.5	4.5	9
Graduate and above	9.33	12	13.67	15	15.33

Source: 68 Round of NSSO, 2011-12

The private and social rate of returns on educational investments has been extensively studied. Table 2, based on a study of (Duraisamy, 2002 [14]), (Vasudeva, 2006 [15]) and (Agrawal, 2011 [16]), shows that it is economically profitable to invest in education. Research by (Psacharopoulos & Patrinos, 2004 [3]) shows that the addition of 1 year of education adds 10% to a person's average wage.

Table 2: Private Rate of Return on educational investment in India.

Authors	Primary	Middle	Secondary	Higher
Duraisamy (2002)	7.8	7.4	17.7	12.7
Vasudeva Dutta (2006)	0.97	2.02	4.64	10.26
Agrawal (2011)	5.47	6.15	12.21	15.87

Source: Duraisamy 2002, Vasudeva 2006 and Agrawal 2011

(P. Geetha, 2014 [17]), in a study on recent data from the India Human Development Survey (IHDS) [18] by the National Council of Applied Economic Research (NCAER) shows the age-earning profile of persons between the age group of 10 to 60 years by levels of education in India. Their study has found higher earning as well as higher increments for subsequent levels of education. (See Figure 2.)

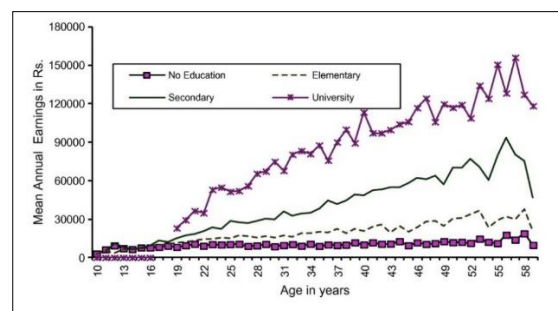


Figure 2: Age Earning Profile in India for different levels of education

Source: P Geetha Raani, 2014

In their paper titled "Income Differential and Returns to Education in India, 2005", Indicus Analytics [19] calculated the percentage difference in the total earnings at different education levels and the likelihood of earning. The study concluded that while the percentage difference in earning is between 31 to 190 with increasing education level, the likelihood of earning increases is 5.1 times more for Graduate and above. See Figure 3.

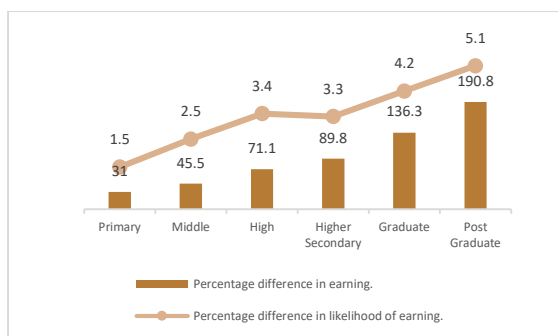


Figure 3: Percentage difference in the earning and likelihood of earning in India with the change in education level.

Source: Indicus Analytics - Income Differential and Returns to Education in India.

Like the above, a myriad of studies has confirmed that it is profitable to invest in education. A higher education level increases a person's earning, the likelihood of earning, and growth during the earning. Moreover, apart from the pecuniary benefits, education offers psychological and social benefits, ultimately leading to individuals' overall development. Despite its paramount importance, lack of financial stability devoid the poor children of completing a formal education in a timely manner, leaving them destitute for the whole life.

4. Affordability of education in India.

India has one of the highest education dropout percentages among developing nations. As per 'Social Consumption: Education Data' conducted in NSSO 71st round (2014) [20], it was found that 33 to 38 % of persons in the age group of 5-29 drop/discontinue from the study. Their detailed study on the reason for drop out (Sateesh and TV, 2014 [22]) stated financial stability as a principal reason for discontinuing education.

The NSSO 71st survey [20] has also calculated the average expenditure on private education across different levels, as depicted in Figure 4.

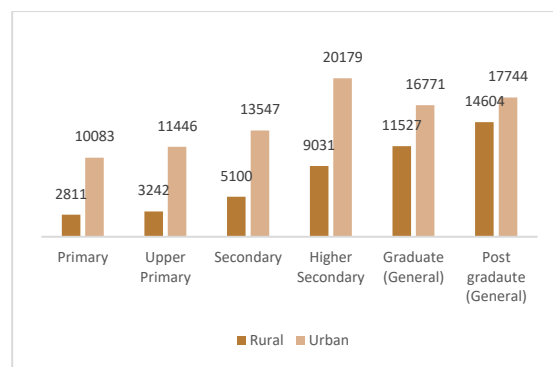


Figure 4: Expenditure on general private education.

Source: NSSO 71st round - 'Social Consumption: Education', 2014

In another survey by CARE Rating, a Mumbai based corporate finance company, the cost of non-professional education is found similar (Figure 5).

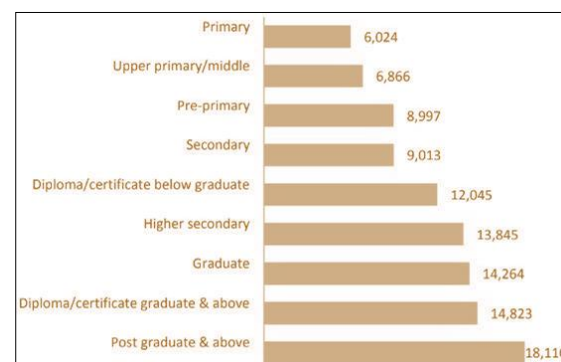


Figure 5: Average cost of education for different levels of education.

Source: CARE Rating, 2015

Indian households' income has been extensively studied, and a majority of research converge on the point that wealth in India, similar to most developed countries, is concentrated in the accounts of the wealthiest quintile. As per the ICE 360 survey [21], nearly half of the nation's wealth is with the top 20% of the household, while the most impoverished 20% of households constitute only 7% of the nation's wealth. Table 3 shows the earning of all quintiles in India, as calculated in the IHDS 2011-12 by the National Council for Applied Economic Research [19].

Table 3: Annual Household Income in India of each quintile.

Income Quintiles	Annual Household Income Range (Rs.)
Poorest Quintile (Poorest 20%)	1,000 - 33,000
2nd Quintile	33,001 - 55,640
3rd Quintile	55,641 - 88,820
4th Quintile	88,821 - 1,59,600
Richest Quintile (Richest 20%)	1,59,601+

Source: IHDS, National Council for Applied Economic Research

Aggregating the minimum required cost of general education from primary to graduation using a weighted mean of the year spent, the average cost comes to around INR 2,00,000 for 15 years. The cost of professional education, including medicine, business, and engineering, is much higher, as reported by NSSO in its 71st survey [20].

While education remains affordable for the top quintiles, it remains challenging for the poor to pursue formal education above the elementary level. The cost of education and the difficulty of maintaining earning and education, in most cases, are significant causes of high drop rates in the country. While those who are exceptionally brilliant can secure a university scholarship, a vast majority decide to live a life with a low education level and trap themselves in the mire of unending penury.

5. Invest in an underprivileged child policy.

As research has shown, education is a profitable investment in India. It has numerous pecuniary and social benefits, and the cost of education, for at least non-professional courses (Medicine, Engineering, and Business), is affordable for the higher quintiles of the income spectrum. This paper suggests the concept of selecting impoverished children who wish to study for a 20 years educational program. As the rate of returns on education is higher than another investment plan available in the country, the policy claims to be lucrative for the investors.

Though the rate of return from education cannot be directly compared with the capital investment and the risk involved in the failure of education will be a moot point, data-driven research, as mentioned in sub-topic 3 of this paper, found it is overall profitable to invest in

education. The net benefit will depend on several factors: child ability to grasp, willingness to give effort, and market-driven forces like job availability and pay scale. Above this, the welfare aspect of this policy should not be ignored.

This paper suggests opening an institute that will select willful children devoid of education as the beneficiary investment in their education. The beneficiary's performance shall be monitored timely, and anyone not performing may be withdrawn from the program. The obligation to pay back the invested money with adjusted interest will act as a retirement plan.

To conclude, close to 100 million children are devoid of education, most of them for financial instability, and they need immediate help to emancipate them from the mire of penury.

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