

Female education and economic growth

Economics



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Female Education and Economic Growth Case Study Of India Economic growth in India India is classified as a lower middle income country, and since 2011 is no longer regarded as a developing country (World Bank Database, 2012) due to recent high economic growth (Kohli, 2006). In 2010, the country had a real GDP growth of 8.8 percent and a nominal GDP per capita of 1410.3 dollars (World Bank Database, 2012). According to AT Kearney, an International consulting group (Rao & Varghese, 2009), India is ranked as one of the best countries to start a new business in.

The foreign investment rate, might be a proof of that. The ministry of finance in India believes it will reach almost 40 percent of the GDP by 2013. Not only the foreign investments have increased but the domestic savings and investments has also gone up and were about 30 percent of the GDP in 2009 (Rao & Varghese, 2009). The ratio of poor people has decreased from 45.3 percent to 29.8 percent between year 2000 and 2010 (World Bank Database, 2012). Even if poverty has decreased one third of the population is still thought to be poor (World Bank Database, 2012).

Poverty negatively affects the opportunity for many to be able to enroll in school negatively. The state has a major role to mass educate the population and increase human capital (Duraismy, 2001). One of the most important ways to do that is to reduce the fertility rate. It is one of the major components to long-term economic growth in India (Dreze & Murthi, 2001; Tilak, 2006; World Bank, 1997; Yadava & Chadney, 1994). A lower fertility rate means a higher GDP per capita (Weil, 2009), and more money to invest in the country and its inhabitants (World Bank, 1997). Education in India The 1.1 billion people (World Bank Database, 2012) of India's 28 states, together

with its seven union territories, do not speak the same language, do not share the same culture and do not have the same religious beliefs. Educational system differs in the respective states due to the fact that it is partly regulated by the state and partly by the local government (Kajisa ; Palanichamy, 2009; World Bank, 1997; World Bank, 2004). In 1999 India spent 4.5 percent of its total GDP on education, but spending on education has declined since then. In 2006, spending dropped to 3.1 percent (World Bank Database, 2012).

Article 45 in the Indian Constitution states: "... for free and compulsory education for all children until they reach the age of 14" (in Andreosso-O'Callaghan, 2003). As can be seen in article 45, ambitions have been high since 1960s. In year 2000 approximately 18.5 million children were out of school. In 2007 the number was 4.9 million. Primary completion rate also increased and in 2008 it was around 95 percent, for both males and females⁸ (World Bank, 2012). The quality of governmental schools has been questioned in India (Duraisamy, 2001). Even if the completion rate in primary schooling is high, literacy rate is not reflecting that.

Between year 2000 and 2006 there has been little change in the literacy rates, which was just under 50 percent for females and approximately 75 percent for males (2006) (World Bank, 2012). Some argue that good quality schooling is only available for the rich and higher middle class in private schools, especially for boys (Andreosso-O'Callaghan, 2003). According to Easterly (Andreosso-O'Callaghan, 2003) elite education does not lead to economic growth. If ability is seen as innate, it means that the majority of

the people who are not included in the elite will not be able to use their full potential.

This is a great social loss, and might slow down India's future long-term economic growth (Esteve- Volart, 2004; Klasen, 2002; Rao ; Varghese, 2009). For example, in China, mass education has been the key to a fast growing economy (Andreosso-O'Callaghan, 2003). Chatterji (2008) claims that primary education has the highest correlation with economic growth in India, secondary education have some effect and tertiary education being insignificant to economic growth. The reason Chatterji (2008) came to that conclusion might be the debated " surplus of education" in the media.

India supplied domestic labor market with 22 million graduates (2009) and faced high youth unemployment rates (Rao & Varghese, 2009). However, Tilak (2007) disagrees. According to him higher education has a significant effect on economic growth, but it is not as strong as the effects of primary and secondary education on economic growth in India. Female education in India As mentioned above approximately 18.5 million were out of school in the year of 2000, almost 75 percent of these children were girls⁹. Out of 5 million children out of school in 2007, 3.5 million were girls.

The data indicates that ratio is still approximately the same. In year 2007 the expected years of education for women and men respectively was 10.9 for males and 9.8 for females. However, this was not reflected on the average years of schooling in 2010. The mean years of schooling for girls over the age of 15 were approximately 4.5 years and about 7 years for boys (World Bank, 2012). 10 Figure 1: Source: World Bank, World Development Indicators and Global Development Finance (World Bank Database, 2012). As can be <https://assignbuster.com/female-education-and-economic-growth/>

seen in figure 1, gross female school enrollment¹¹ rate has increased for all levels in India between 1990 and 2010.

The highest increase has been in primary education after the millenium and forward. The high percentage rate of female enrollment rate in primary schooling might be an indication that women in all ages are enrolling in school, independent from appropriate primary schooling age in the country. This might be due to an increase in informal schooling, which will be reviewed later in the paper. Secondary schooling is spiriling up as well, which might be due to an increase of the middle class in India. However, tertiary education does not have as high increase in enrollment as primary and secondary schooling.

This might as well be due to an increase of the middle class. Females staying at home is a sign of financial stability (Duraismy, 2001), therefore the incentives to enroll in tertiary education might decrease. Figure 2: When figure 1, is compared to figure 2, which shows the trends for male schooling in India between 1990-2010, it is possible to see that the gap between male and female enrollment is closing. In the beginning of 1990 almost 110 percent of males were enrolled in primary schooling, whilst only 80 percent of females were enrolled in the same level.

In 2010 the enrollment for males and females is almost the same. This might be because of subsidies for girls, but also that informal schooling which first of all targets females and the poor has showed results. The enrollment for male secondary schooling has slightly increased during the last two decades, while the female secondary enrollment significantly has increased. This might be due to the facts mentioned for primary schooling, as well as <https://assignbuster.com/female-education-and-economic-growth/>

completion of primary schooling and therefore the ability to move on to the next level of schooling.

The increase of the middle class might also be a reason for this. Tertiary schooling is moving in the same pace more or less both for males and females, slightly more males than females join higher education. Which might be an indicator that the most bright ones, or with the most money have the ability to join, independent of gender. It is also important to mention the states hard work since the 1960's to make its inhabitants see the positive sides with education, working hard for families to see the benefits of schooling for girls.

A woman's socioeconomic background might affect the level of completion rate. If a family is poor, one rather invests in sons than daughters (Chaudhri & Jha, 2011; World Bank, 1997). Women from the middle class in the majority of cases finish at least primary education, irrespectively if they live in rural or urban area. Women from the upper class in the urban areas, usually have at least secondary education, and more often can chose if they want to become a part of the labor force or not. There are few or no social barriers prohibiting them from joining the labor market (World Bank, 1997).

Duraisamy (2001) came to the conclusion that female education has a positive rate of return for all levels of education in India. World Bank (1997) came to the same conclusion, but only when participation in the labor market was not accounted. One reason for this might be that majority of women do not work after finishing school but become stay at home mothers. Therefore education for women might not give the same economic return on

the investment compared to men who join the labor force and therefore contribute to increased income per capita.

This finding might be questioned due to exclusions of positive externalities mentioned earlier in the paper. Before continuing on and reviewing the impacts of female education on economic growth through a decline in fertility rate and increase in human capital, it is important to clarify the diversity in India. In the 1990s some states had almost universal education, such as the southern state of Kerala. In Kerala, both men and women can choose whether to join the labor force or not. In other parts of the country, such as states of Bihar and Rajasthan, overall female enrollment was about 50 percent.

In Punjab on the other hand, an agricultural state in the north, overall female enrollment was almost 80 percent, but labor participation for women was extremely low (World Bank, 1997; World Bank, 2004). Female education's effect on fertility rate in India Dreze and Murthi (2001) argue that female education together with low mortality rate and low son- preference are the only significant factors reducing fertility rate in India. They add that modernization and urbanization, poverty reduction and male literacy have no significant association with reduced fertility rate.

On a national level, a drop in fertility rate reduces population growth and therefore increases income per capita. A lower mortality rate is indirectly affected by female education. According to the World Bank (1997; 2004) literate women have more knowledge about how to feed their children; they grasp the importance of hygiene and clean water, and know more about a child's basic health. This decreases child mortality, and therefore women

does not have to plan for as many children (Dreze and Murthi, 2001; Yadava & Chadney, 1994). Figure 3:

Source: World Bank, World Development Indicators and Global Development Finance (World Bank Database, 2012). Figure 4: Source: World Bank, World Development Indicators and Global Development Finance (World Bank Database, 2012). In figure three and four one can view that fertility rate and mortality rate have decreased significantly in the last 20 years. Majority of the scholars such as Klasen (2002) claim that only secondary female education has a direct effect on reducing fertility rate while primary education has an indirect effect in reducing fertility rate through reducing mortality rate for children under the age of five.

Comparing figures one, two and three one can comprehend that it might be true. Mortality rate has had a higher percentage decrease than fertility rate and primary female enrollment is higher than secondary. There is a strong son-preference in India. Parents might continue to have children until they get a son. A weaker son-preference could decrease the fertility rate by eight percent (Dreze and Murthi, 2001; Chaudhri & Jha, 2011; Esteve-Volart, 2004; Mutharayappa, Choe, Arnold & Roy, 1997; Yadava & Chadney, 1994).

Some argue that modernization did not show to have any direct effect on fertility rate in India but might lower son-preference indirectly through female education. However, this might not only be true for female education solely, but for education in general as well (Dreze & Murthi, 2001; Yadava & Chadney, 1994).¹³ In India, female secondary education has a stronger direct effect in reducing fertility rate, than primary education. An educated

woman might not desire as many children as an uneducated one. They also have a higher probability to give birth to as many children as desired.

Thus, the actual family size has a higher chance to be close to the desired. This indicates to an increased knowledge of contraception use and that educated women marry later than uneducated ones. The income and substitution effect both occur in India, as explained above (Dreze & Murthi, 2004). In 1994 in Gujarat, women with no education had 3.6 children, mothers with primary education had 3.3 children, and women who had completed secondary school had 2.4 children. In Rajasthan the fertility rate in 1991 was 6, and in Kerala the fertility rate the same year was 2.6.

The rate of female enrollment in these states was very different, from almost universal in Kerala to less than 50 percent in Rajasthan (Mutharayappa, Choe, Arnold & Roy, 1997; World Bank 1997; 2004).¹⁴ It is commonly believed that poverty has a significant positive effect on fertility rate. As mentioned earlier, Dreze and Murthi (2001) have not found any association between poverty and fertility rate in India. Studies have shown that parents do not view children as financial assets. Instead they are seen as a financial burden in short-term, with a possibility that sons will take care of them in old age.

This perception in India seems to be independent of income. Female education's effect on human capital in India After China, India has the second largest labor force in the world, of approximately 500 million people (Rao ; Varghese, 2009; Sahoo ; Kumar Dash, 2009). This is a possible foundation for high productivity and therefore economic growth. However, if the population is unhealthy, illiterate and uneducated then the large population might not

translate into a high human capital. In India, where majority of the mothers stay at home, they are the ones taking care of children's health needs (Esteve-Volart, 2004).

There has been shown, not only in India, but in the whole world, that mothers who are literate have more nurtured and healthier children, than their illiterate counterpart (Tembon & Fort, 2008). Therefore female education has shown to be both directly (through women joining the labor force) and indirectly related to a higher human capital, hence higher economic growth. Good health and nutrition received in early age is an important condition for good health as an adult. For example, in India, vaccination against polio and malaria increases when a mother is educated to some extent (World Bank 1997).

However the causality between female education and better health and attainment in school can be questioned. The poorest women have the least access to education in India, and therefore do not have access to financial assets as educated women might have. Healthy children facilitate mother's ability to go back to paid or un-paid work much faster than women who have unhealthy children (World Bank, 1997; 2004). This means that the opportunity cost of female education for girls decrease, if mothers and siblings are healthier. This might increase female enrollment, and decrease drop-out rate among girls.

Therefore, an increase in knowledge of basic health due to female education increases human capital in more than one way (Esteve-Volart, 2004; Rao ; Varghese, 2009). In the majority of cases, fathers join the labor market while mothers stay at home, especially in rural areas. In India there is a positive

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relation between educated mothers and their children's achievements in school. Studies have shown that a mother's education increases not only the health and therefore concentration level of a child in school, but also the motivation and grades.

Once again we can see that educated mothers have positive effects on their daughters. Educated mothers, especially in urban areas, encourage their daughters more often to strive for a higher education, than uneducated ones (World Bank, 2004). Policies that promote female education in India The Indian government has been working hard since the late 1960s to be able to give universal education to its population (Duraismy, 2001; Tilak, 2006). It is not the easiest task in India where the population grew from approximately 890 million in 1991 to over 1. billion in 2010. The hardest ones to reach are the Dalit girls. Indian government has tried to increase the demand for education for them through subventioning the direct costs of their education, for example text books and uniforms (Ferry, 2008; Munshi ; Rosenzweig, 2006). 16 A project that started in the 1980s in India was informal schooling. The purpose was and is mass education for those who had the least possibilities to enter formal schooling and provide basic knowledge in subjects that students can use in their everyday life.

These schools reduce opportunity cost of female education through having schools closer to communities in rural areas and during the day when girls do not have to be involved in household work. There are many positive effects of informal schooling, which are similar to those of primary education. However, the national institute of educational planning and administration

reported that the informal education had several weaknesses, especially in the poorest areas in the country like Bihar.

It was said to be underfunded, curriculum was thought by unmotivated teachers and few children continued with formal education (World Bank, 1997). Studies made in urban Mumbai shows that some girls from former casteless groups, the Dalits, have been the biggest winners. These women used free education offered to them and became active members of the labor market and have taken themselves out of the poverty trap. In contrast to women from the middle class who might not have been able to do so because of the social norms (Ferry, 2008).

In summation, the key factor for long-term economic growth in India is a decrease in fertility rate. The proof that female education affects economic growth through fertility rate reflects findings of Dreze and Murthi (2001) who argue that the only factors which decrease fertility rate in India are female education, low mortality rate and low son-preference. It is also proven that female education has both direct and indirect effect on human capital which creates effect on economic growth as well. Obstacles for female education in India are mainly related to social and cultural norms, as well as a high population.