Higher economic growth and lower population growth
Why school attendance is so important for girls

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Education provides the ignition to spark socio-economic progress. Education for girls in particular decreases the risk of poverty for entire families in the medium term. It improves the health of mothers and their children while helping women to avoid premature, unwanted pregnancies. This is essential for putting the brakes on population growth, primarily in parts of Asia and Sub-Saharan Africa.

Girls are disadvantaged with regard to education
Currently, around 263 million children and young people across the world are not able to attend a primary or secondary school. That equates to around a fifth of all children and young people in this age bracket. Although the figure, which stood at 375 million in 2000, has improved considerably, access to education remains limited in many parts of the world, particularly for girls. Girls make up 53% of the children at primary school age who do not attend school. Approximately half of them, that is 16 million girls, will presumably never go to school at all. Discrimination against girls is prevalent in Sub-Saharan Africa, especially at secondary school level. In countries such as Chad and the Central African Republic, less than 15% of 12 to 15 year-old girls attended lower secondary school in 2014. For boys, the proportion in education was twice as high.

According to the Sustainable Development Goals, the aim is that by 2030 all boys and girls across the world will complete primary and secondary school education. Particularly for countries with high population growth, this presents an enormous challenge. In many places, children are being born at a faster rate than it is possible to build schools or train teachers for them. In Niger in West Africa, for example, six million children will reach school age by 2030, in addition to another four million who are already not attending a school.

Educating girls reduces poverty
Approximately 200 million illiterate people live south of the Sahara desert. Of these, 59% are women. Such people hardly stand a chance when it comes to becoming a functioning member of a globalised society. For girls and young women, attending school provides them with the opportunity to pursue life goals that include more than motherhood alone. In most cases, however, they are currently denied this opportunity. Only 21.5% of all economically active women in Sub-Saharan Africa are employed in paid positions. Just under half of them are informal workers, mostly with no social security. About a third work unpaid in family-run businesses.

5 See footnote 1.
necessities. Women are frequently only able to obtain a better paid job if they possess a higher degree of education.

According to the global average, for each additional year of school or training completed, there is an average gain of approximately 10% in income over lifetime. The higher the quality of education, the greater its influence. And added value increases with each year of education. At 11.6%, the returns made from educating women are higher than for men, where the figure for the latter is 9.6%. Countries south of the Sahara witness the highest average figures at 13%, while North Africa and the Middle East have the lowest at between 2 and 3%, where women are less likely to find an occupation relevant to their qualifications.

Educating girls improves health

Higher income from women means more money is invested in the family for food, doctors’ appointments, medicine and, of course, educating the children. In all countries for which there is data available, a higher level of education on average results in better health. On the one hand, this is due to a higher income. On the other hand, people who are better educated have easier access to medically relevant information and are more likely to be convinced of the benefits of health care. A study in South Africa shows that women who have completed secondary school education are at considerably lower risk of contracting HIV than those without a secondary education.

Almost everywhere, the probability of small children surviving to adulthood increases in correlation to the mother’s level of education. The father’s level of education however is less relevant. The effect of income also appears to be comparably small: child mortality is higher in wealthier families with less well-educated mothers than in poorer families with educated mothers. Since education provides one with abstract thinking skills, educated women have a better understanding of why using boiled water protects a child from fatal diarrhoea, for example. Moreover, they are able to communicate more easily with medical staff and understand the instructions on pharmaceutical packaging, or grasp the benefits of sex education and family planning.

Educating girls decelerates population growth

High child mortality is not only a sign of poor living conditions - It also leads to persistently high birthrates, as for many parents in developing countries, children are a form of social security. Couples frequently decide to have fewer children only once they can be sure that their offspring has a clear chance at surviving. According to statistics, the average number of children per woman also drops after a delay once there is a downturn in child mortality. At first glance, this does not necessarily reduce population growth, since considerably more children survive. In the past, however, the decrease in the number of children per woman had a consistently greater effect than a downturn in mortality. As a result, all the countries to have gone through this demographic process have also experienced a downturn in population growth.

Educated girls marry later

Girls living in less developed countries are often married off early. A third of all 15-year-old girls in Chad or Niger are married or in a quasi-marital relationship. Attending school can, at least for a time, keep girls off the marriage market. UNESCO estimates

Educated women have fewer children

The particular significance of secondary education

| Average number of children per woman in relation to their level of education |
|-----------------------------|-----------------|-----------------|-----------------|
| Ethiopia                    | Nigeria         | Pakistan        |
| Without school education    | Primary school  | Lower secondary |
|                             | attendance      | Upper secondary |
| 0                           | 1               | 2               |
| 1                           | 2               | 3               |
| 2                           | 3               | 4               |
| 3                           | 4               | 5               |
| 4                           | 5               | 6               |
| 5                           | 6               | 7               |

Source: Wittgenstein Centre

Looking to the future
Results in the education sector are decisive for population development

Development of global population (in billions) according to various education development scenarios

<table>
<thead>
<tr>
<th>Scenario 1</th>
<th>Scenario 2</th>
<th>Scenario 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant enrollment rate</td>
<td>Global trend scenario</td>
<td>Fast track scenario</td>
</tr>
<tr>
<td>Population under 15</td>
<td>Without education</td>
<td>Primary education</td>
</tr>
</tbody>
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Source: Wittgenstein Centre

143 million \(^{15}\) people are expected to be alive in 2050. Nigeria would see a population growth from the current 182 million \(^{16}\) to 435 million if no further improvements were made to the education sector; investments made in the same vein as the East Asian economies would see growth to just 333 million. \(^{17}\)

World population of 10 billion?

In the first scenario, the world population would reach the 10-billion mark by about 2050. In the third scenario, however, it would only reach approximately 8.5 billion. Deviations are set to be larger in the long term. By 2100, the world population figure could deviate by around 4 billion, depending on the efforts made to improve education. \(^{18}\)

Bangladesh and Pakistan are good examples to illustrate the differences in the future development of individual countries depending on their investment in the education of girls. These two countries share a common cultural and religious history. Until 1971, Bangladesh and Pakistan formed one state. Although Bangladesh was in a considerably poorer state in the period initially after independence, the education of girls became far more significant earlier than in Pakistan. In 2009, almost all Bangladeshi children were able to attend a primary school, whereas approximately 20% of all girls in Pakistan today do not attend school. An important step was to introduce a scholarship programme for girls in secondary school. Their enrolment figures into secondary school have since increased from 14% (1990) to 60% (2013). \(^{19}\)

One of the many results of the investments made is evident in the number of women in employment; for Bangladesh the figure lies at 45% compared to 26% in Pakistan. \(^{20}\) The birth rate has also fallen, from 7 to 2.3 children per woman since 1970, while the figure is considerably higher in Pakistan at 3.8. \(^{21}\) Consequently, the population of Bangladesh is expected to grow by approximately 20% by 2050; by contrast the figure in Pakistan is set to double. \(^{22}\)

Everyone benefits

Education increases not merely indi-

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\(^{13}\) See footnote 11.


\(^{16}\) See footnote 14.

\(^{17}\) See footnote 15.

\(^{18}\) See footnote 10.

\(^{19}\) See footnote 1.

\(^{20}\) See footnote 6.


\(^{22}\) See endnote 15.
vidual and economic wealth; it in-
spires social change across the
board. Demographic changes then
play an important role: education,
particularly for women, and better life
perspectives trigger a demographic
shift, leading societies out of high birth
rates and high mortality to enjoy lower
birth rates and greater longevity.
Since mortality rates are the first to
drop with this shift, while the number
of children per woman only decreases
after a period of time, particularly
large age groups grow up in the short
term, followed by smaller age groups
in the following years. Once the last
high-birthrate age groups become old
enough to work, society benefits from
a proportionally large workforce. They
provide a demographic bonus and, if
they are sufficiently qualified and
enough jobs are available, can trigger
a colossal boom for the economy. The
demographic bonus becomes a de-
mographic dividend. In the Four Asian
Tigers, around a third of growth re-

tults from exploiting this type of de-
mographic dividend.23

It all depends on the right educa-
tion
To properly utilise the demographic
dividend, education has to focus on
meeting the needs of the labour mar-
et. In many countries, vocational
training has a poorer image than aca-
demic study. As a result, more and
more secondary school leavers are
thronging into overfull universities.
And yet many graduates are unable to
find a job in the public or private sec-
tors. This is due primarily to the lack
of quality university teaching in regard
to the extremely high number of stu-
dents, a high percentage of which
study social sciences or the humani-
ties. This is the main reason for such
high unemployment amongst aca-
demics in North African states, such
as Egypt and Tunisia.

How to improve girls’ education
The societal fruits of efforts in educa-
tion are harvested only at a later date.

Education policy therefore needs to
adopt a long-term view. The following
points ought to be taken into account
when planning how to funnel invest-
ment:

- It must be made possible for all
  children to receive a good school
  education, which provides them
  with at least a secondary level
  qualification. Conditional cash
  transfers can be offered as incen-
tives for parents to send their chil-
dren to school instead of to work.
  Programmes such as Oportuni-
dades in Mexiko and Bolsa
  Familia in Brazil have improved
  pupils’ participation in lessons.24
- Girls need to be provided the
  same access to education as
  boys. This applies to all forms of
  schooling. The opportunities for
  girls at secondary level are con-
siderably improved through schol-
arship programmes, for example.
- Girls in particular are affected by
crises and should therefore be the
key recipients of opportunities for
education.
- Success in education depends
  rather on the actual progress
  made than on the number of
  school years completed. Modern
curriculums, qualified teachers
and a good school infrastructure
are required for this. Having more
women in teaching positions pro-
vides role models for girls and im-
proves their participation in the
class.25
- Vocational and tertiary education
in particular needs to become
more focused on the needs of the
labour market. The right incen-
tives and targeted funding can
contribute to change in this area.
- Education across the world lacks
funding. From 1999 to 2012, the
money spent on education
 amounted to between 13 and
14 % of national budgets across
the world.26 Only 2-4 % of interna-
tional funds from development co-
operation were used to provide
basic education. The aim is to
reach the recommended
UNESCO target to raise govern-
ment spending on education to
between 15 and 20 % of the na-
tional budget or to between 4 and
6 % of the gross domestic prod-
uct.27

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