Economic and Social Causes for a Lack of Sustainable Development:
 a Comparison Between India and Ethiopia

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Abstract

Understanding the issues of a country is often a requirement for the full understanding of the feasible solutions. The aim of this paper is to study, to analyze and to identify the multiple reasons for a lack of development in two very different areas of the world: Tamil Nadu, in India and Ethiopia, in Africa. Most of the literature shows that the causes of underdevelopment in developing countries may be related to many different issues: a lack of technology, social and cultural issues, environment, the availability of natural resources, among the others. Examining all aspects of the issue, this is the reason why different solutions should be provided.

Both Tamil Nadu and Ethiopia are growing economies where there are huge differentials in economic development and growth within the country. Moreover, both countries could be growing more and faster than what they are actually doing.

Tamil Nadu is a State located in the South-Eastern part of the Indian peninsula. It is a very populous State, with 67.86 millions of inhabitants, it covers an area of 130,058 km² and its GDP is $145,868 millions. Since 2012, Tamil Nadu is the second richest State in India, with $160 billions in GDP. It also has the highest number of business enterprises and it is one of the first States in India in total employment. Despite Tamil Nadu is one of the most advanced States of India, its rural areas are among the poorest of the whole Indian peninsula.

Ethiopia is located in the Centre-Eastern part of Africa, it has 94,1 millions of inhabitants, it covers an area of 1,127,127 km² and its GDP is $47.53 billions. From 2004 to the financial crisis in 2009, Ethiopia was one of the fastest growing economies in the world. In spite of this growth, GDP per capita is very low: civil wars and recurrent drought made Ethiopia one of the poorest countries in the world (about 40% of population lives below the international poverty line $1.25).

The aim of the paper is to highlight the reasons why some resource-abundant countries, that could be rich and advanced countries, experience an high percentage of poor population and are not completely able to pursue a development path.

The paper will present a work in progress based on the analogies and the differences in the development path in Tamil Nadu and Ethiopia. This will also be an open work, on which we will ask for the contribution from our international colleagues.

Keywords: Growth, Development Path, India, Ethiopia.
Summary: Introduction; 1. India and Ethiopia: an economic outlook, 1.2 International trade data; 2. International ranking, 2.1 Index of Economic Freedom, 2.2 Doing Business Index, 2.3 Social Progress Index, 2.4 Human Development Index; 3. Health in India and Ethiopia, 3.1. Health Economic and Human Resources; 3. Education in India and Ethiopia, 3.1 Literacy, 3.2 School participation, 3.3 Education Economic and Human Resources; 5. Feasible solutions.

Introduction

Poverty is a wide and complex mechanism that can hardly be defined within very strict boundaries. First theories on poverty were essentially connected to a lack of income that didn’t allow people to be physically efficient (Rowntree, 1901), even if also morality rate was used in order to measure the well-being of individuals. Since then, many theories suggested that poverty conditions of individuals and populations need a various set of indicators in order to be understood. One of the most relevant theories (on which even many international studies are based) is the capabilities theory developed by Sen (1980): well-being of a country really increases when also increase the chances for individuals of achieving their personal and professional goals. Nowadays, the approach developed by the United Nations Development Program (UNDP) is widespread, since it captures the nature itself of poverty, that is a multidimensional issue which is not determined only by a lack of income, but also by one social and cultural issues, like health, education, representation.

The development differentials between advanced countries and emerging ones also highlighted the need for a double definition of poverty: absolute poverty and relative poverty. People in absolute poverty are in acute deprivation, not having the minimum income needed to meet the basic requirements, neither the access to many basic services, like health or education. World Bank set this threshold at 1.25$ a day. Life of people living in relative poverty conditions are quite different, since their income is higher than 1.25$ a day (so they are not poor in absolute terms), but their income and their living standards are much worse than the average levels of the place they live in. One of the consequences of poverty lies in exclusion, the impossibility for poor people of being involved in social, economic, cultural life of their society. Due to this lack of integration, poor people are not able to get an education, to find a good job, to receive adequate health care services for themselves and for their children. This mechanism, also known as the poverty trap, connects enduring poverty to the variables and the conditions that cause the lack of income. Poverty trap may affect not only individuals, but also countries.

In our paper, we tried to highlight that the income differentials are just one of the variable that can explain the development of a country and that there are other variables, such as basic health and education services, that could really help the development of countries that have the potential for growing and for increasing the well-being of their population.

1. India and Ethiopia: an economic outlook

1.1 Production data
India and Ethiopia are both emerging countries, but they show very different paths of development. Indeed, India ranks 10th in the World Bank 2013 GDP ranking, while Ethiopia ranks 84th and,

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3 All data in this chapter are taken from the World Bank Databases.
during the last 15 years, India’s GDP in current US$ rapidly and constantly grew, while Ethiopia’s growth is much lower and slower (Figure 1).

Figure 1 - GDP (current US$) in India and Ethiopia, 2000-2013

As well as many emerging economies, both countries are growing by an higher rate with respect to the world as a whole. India’s GDP growth rate (that, in 2000, was slightly lower than the world average, since then always remained higher than the world value and is 6.9% in 2013). GDP growth for Ethiopia is even higher, since it is 10.5% (Figure 2).

Figure 2 - GDP growth in the World, India and Ethiopia, 2000-2013

Even though current GDP’s values are very dissimilar, GDP growth data seem to be quite encouraging, since both countries show a very dynamic trend. But literature shows that GDP growth doesn’t mean higher living standards for the population. A very preliminary attempt to measure wellness of the population is GNI per capita PPP, an indicator that is based on the conversion of GNI to international dollars using purchasing power parity rates.

If compared to the world average, GNI per capita PPP in India and in Ethiopia are enormously lower (Figure 3).
In Figure 4 we decided to compare only India and Ethiopia and this way we may see that, even though they both are growing, India is performing much better. In 2000, GNI per capita PPP in India was 460$. In 2013, it is 1,570$. In Ethiopia, while it was 130$ in 2000, it is now 470$ (Figure 4).

As for the productive structure of the countries, the development of the service industry hypothesis provides that development is usually accompanied by an higher percentage of services as a share of GDP and the progressive substitution of agricultural productive activities with industry and, most of all, services. Since Rostow, theories elaborated in advanced countries have often been based on the idea that the development path of emerging countries should follow consecutive stages. In many cases, the first stage was based on the prevalence of agriculture, the second stage on industry and finally the third stage on services.

This is the reason why we often use the value added of agriculture as a percentage of GDP like a proxy for assessing the low level of development of a country.

In order to analyze the development stage of India and Ethiopia, we used data on GDP composition (agriculture, industry, services), starting from agriculture (Figure 5).
Agriculture contribution to GDP in Ethiopia is twice the value in India and, even if it slightly decreased since 2000 (when it was 47%), it still is 45% in 2013. Also for India there has been a decreasing trend: agriculture value added as a share of GDP was 23% in 2000 and is 18% in 2013.

Figure 5 - Agriculture, value added (% of GDP) in India and Ethiopia, 2000-2013

Just to confirm the hypothesis, we may see some data about some advanced countries: in the United States, agriculture contribution to GDP is around 1.3%, in Ireland 1.55%, in Singapore 0.03%, while it is 59.5% in Sierra Leone, 37.2% in Niger, 35.1% in Nepal. In theory, agriculture as a share of GDP value added should then make way for industry and, finally, to services. While agriculture value added was higher in Ethiopia, industry value added is much higher in India. Furthermore, in Ethiopia it remained steadily around 12% during the last years, while it grew in India from 26% to 31% (Figure 6).

Figure 6 - Industry, value added (% of GDP) in India and Ethiopia, 2000-2013

Anyway, the real innovation comes with services. Theory suggests that advanced countries tend to produce an higher share of services. Figure 7 shows that India has the highest percentage of services as a value added of GDP. Also, both countries’ trend is quite stable: percentage of services in India was 50% in 2000 and is 51% in 2013; in Ethiopia, it was 40% in 2000 and it is 43% in 2013.
The data we used in the previous part of the research provided a framework for a better understanding of the national paths of development of both countries and they showed that India is performing better than Ethiopia both for GDP and for GDP composition: GDP and GDP per capita PPP are higher in India and they are also increasing; in Ethiopia, economic development is still very slow and trends are quite steady. Even GDP composition by sector shows an higher share of agriculture and a lower percentage of services in Ethiopia with respect to India. These data picture the performance of a country under the production point of view. To analyze the robustness of a country within the international markets, data on international exchanges are needed, starting from exports and imports of goods and services. We used both indicators as a percentage on GDP to assess the importance of exports and imports on national production. Data on exports of goods and services as a share of GDP are quite interesting, since they highlight two opposite trends in India and in Ethiopia. Indeed, while both countries’ exports were around 12% of GDP in 2000, in 2013 they account for 25% in India and remained the same in Ethiopia (Figure 8).

As for the imports of goods and services as a percentage of GDP, they are growing in both countries. In Ethiopia, they accounted for 23% of GDP in 2000 and they are 20% of GDP in 2013;
in India, they grew faster and almost doubled, from almost 14% of GDP in 2000 to more than 28% in 2013 (Figure 9).

Figure 9 - Imports of goods and services (% GDP) in India and Ethiopia, 2000-2013

India’s development path seems so to be based also on an higher integration on the international markets, since both exports and imports grew during the last years. We know that India is a country whose growth has been very fast and has been supported by the delocalization of production that has been made by many advanced countries. In these cases, both imports and exports tend to rise. Since the country became one important production centre in the world, their exports are rising. But we also saw that India’s GDP and GDP per capita are rapidly growing and both indicators portend that a middle class is also growing and that, this way, even national demand for international goods is rising.

Figure 10 - High-technology exports (% of manufactured exports) in India and Ethiopia, 2000-2013

In the literature, the dependency theories assess that if the economic growth of an emerging economy is based on exports growth, a vicious cycle could arise since emerging countries often export raw materials to advanced countries. Then, rich countries manufacture products out of those commodities. It may also happen that they sell back these commodities to the emerging countries. So, the dynamic relations between advanced and emerging countries do intensify inequalities.
This is the reason why, in order to understand if the growth of exports is due to an increase of dependency or rather to a real economic development of the country, it may be useful to analyze the composition of exports and, even more, the share of high-technology exports on the whole of manufactured exports of the country. During the last years, India and Ethiopia show similar trends but different values: they both are growing, but India steadily shows higher levels of the impact of high-technology exports on manufactured exports (Figure 10).

When considering high-technology exports in current US$, differences between India and Ethiopia are even higher. Since 2000, they rapidly grew in India, while they are still very low in Ethiopia (Figure 11).

Figure 11 - High-technology exports (current US$) in India and Ethiopia, 2000-2013

2. International ranking

Relying on GDP as the unique measure of development provides an incomplete and misleading picture of countries, because it doesn’t capture factors like education, health, property rights, freedom. This is why many international institutions and think thanks started elaborating new kind of indicators for development, efficiency and well-being. For our purposes, we used the following: the Index of Economic Freedom, the Doing Business Index, the Social Progress Index and the Human Development Index.

2.1 Index of Economic Freedom
The Heritage Foundation’s Center for Trade and Economics leads each year the publication of the Economic Freedom Report. The Index of Economic Freedom is based on 10 dimensions of economic freedom that are grouped in 4 areas:

- Rule of law (property rights, freedom from corruption);
- Government size (fiscal freedom, government spending);
- Regulatory efficiency (business freedom, labor freedom, monetary freedom); and
- Market openness (trade freedom, investment freedom, financial freedom).

All data in this chapter are taken from the World Bank Databases.
India
In the 2015 Economic Freedom Report, India is a “mostly unfree” economy, since it ranks 128th with an economic freedom score of 54.6. From 2014, India’s economic freedom score decreased by 1.1 points. Some of the index dimensions increased, like business freedom, property rights, and freedom from corruption, but other dimensions declined (labor freedom and trade freedom). Within the Asia–Pacific region, India ranks 26th out of 41 countries and its economic freedom score still is below the regional and world averages. Main obstacles to economic growth are corruption, lack of infrastructure and fiscal deficits. Furthermore, the state still owns enterprises and banks, legal and regulatory framework aren’t perfectly working and high corruption affects many economic sectors. The highest individual income tax rate is 30.9%, while the highest corporate tax rate is 32.4%. Despite that, during the last years, business registration fees have been widely reduced and the government is favoring foreign investments. Public finance has been bettered and the investment environment has been improved and supported.

Ethiopia
With a score of 51.5, Ethiopia ranks 149th in the 2015 Economic Freedom Index. Important improvements in monetary freedom, freedom from corruption and labor freedom made the score increase 1.5 points with respect to the previous year. Within the Sub-Saharan Africa region,
Ethiopia ranks 37th out of 46 countries and its score (like India) still is below the regional and the world average. State intervention is still high and corruption remains widespread. The right to own the land is not established by law, some relevant sectors of the economy are closed to investment and global trade. A very weak enforcement of regulations discourages business activity. Indeed, foreign investments remain very low. Still, even national business is hard to be started: minimum capital requirement for launching a business is higher than the average annual income. The highest individual income tax rate is 35% and the highest corporate tax rate is 30%. Despite the steady economic growth Ethiopia experienced during last 10 years and the fact that poverty declined from 44% of population in 2000 to 30% in 2011, the country’s per capita income remains among the lowest in the world. Nevertheless, government made big investments in some development projects, and, thanks to a large domestic market, Ethiopia has a great potential.

2.2 Doing Business Index
Doing Business Report is released each year by the World Bank. Its main tool is the Doing Business Index, that covers the following areas:

- Procedures, time, cost and paid-in minimum capital to start a business
- Procedures, time and cost to complete all formalities to build a warehouse
- Procedures, time and cost to get connected to the electrical grid
- Procedures, time and cost to transfer a property
- Movable collateral laws and credit information systems
- Minority shareholders’ rights in related-party transactions
- Payments, time and total tax rate for a firm to comply with all tax regulations
- Documents, time and cost to export and import by seaport
- Procedures, time and cost to resolve a commercial dispute
- Time, cost, outcome and recovery rate for a commercial insolvency.

Doing Business Report 2015 highlights that, once more, the easiest country for doing business is Singapore. The map shown in Figure shows the gap between advanced and emerging countries: yellow colored countries are the easiest places where to do a business, while the blue ones are the most problematic. Among the easiest places, we find North America, Northern Europe, Australia. Almost all the countries in Africa, South America and South Asia are mostly difficult places where doing business.
India

In 2015 Doing Business Report, India ranks 142nd out of 189 economies, losing 2 positions in comparison with the 2014 ranking.

In 2015, India recorded the better performances in the following dimensions:

- protecting minority investors (7th): the country globally ranks very high thanks to its performances in the issues related to disclosure requirements, the liability regime for directors, the access to internal corporate documents, the shareholder rights, the governance structure and the corporate transparency. Furthermore, the country strengthened minority investor protections by requiring higher disclosure of conflicts of interest by board members, by increasing the remedies available in case of prejudicial related-party transactions and by providing additional safeguards for shareholders of privately held companies.
• getting credit (36th): in India legal rights for borrowers and lenders and sharing of credit information are particularly high.

In the Doing Business Report 2015, India showed the worst performances in the following dimensions:
• enforcing contracts (the country ranks 186th): according to data collected by Doing Business, contract enforcement takes 1420 days, costs 39.6% of the value of the claim and requires 46 procedures;
• dealing with construction permits (184th): it requires 25.4 procedures, takes 185.9 days and costs 28.2% of the warehouse value, even if India reduced the time required to obtain a building permit by setting strict time limits for preconstruction approvals;
• starting a business (158th): starting a business in India requires: 11.9 procedures, 28.4 days, 12.2% of income per capita and a minimum capital of 111.2% of income per capita, and, during the last years, India made it easier by reducing the registration fees, but also made it more difficult by introducing a requirement to file a declaration before the beginning of business operations.
• paying taxes (156th): on average, firms make 33 tax payments a year, spend 243 hours a year filing, preparing and paying taxes and pay 61.7% of profits as a total taxes amount, but India improved electronic payment and abolished the fringe benefit tax and eased the administrative burden of paying taxes for firms by introducing mandatory electronic filing and payment for value added tax.

Ethiopia
In 2015 Doing Business Report, Ethiopia ranks 132nd out of 189 economies, losing 3 positions in comparison with the 2014 ranking.

Figure 15 - Doing Business in Ethiopia 2015

According to the last report, Ethiopia performed better in the following dimensions:
• dealing with construction permits (the country ranks 28th): in Ethiopia, it requires 7 procedures, takes 125 days and costs 3.2% of the warehouse value;
• enforcing contracts (50th): it takes 530 days, costs 15.2% of the value of the claim and requires 38 procedures. During the last year, case management improved and the role for the enforcement judge expanded;
• resolving insolvency (74th): on average, procedures take 1.8 years and cost 14.5% of the debtor’s estate, the average recovery rate is 38.3 cents on one dollar.

The weakness points are related to the following issues:
• starting a business (168th): requires 9 procedures, takes 15 days, costs 89.3% of income per capita and requires paid-in minimum capital of 164.4% of income per capita. Starting a business is now easier thanks to the streamlining registration procedures.
• trading across borders (168th): exporting a standard container of goods requires 8 documents, 44 days and an amount of $2380, while importing the same container requires 11 documents, 44 days and an amount of $2960. Internal bureaucratic inefficiencies have been addressed and this is making trading easier;
• getting credit: Ethiopia established an online platform for sharing information on credit and by guaranteed borrowers’ right to inspect their personal data.

2.3 Social Progress Index
The Non-Profit organization Social Progress Imperative started publishing the Social Progress Index three years ago, moved by the awareness that GDP, as well as the other traditional indicators of economic growth, cannot be anymore the exclusive measures of development and wellbeing. The Social Progress Index uses a set of social and environmental indicators for measuring social progress: Basic Human Needs, Foundations of Wellbeing, and Opportunity. Each of these dimensions comprises 4 indicators.
Basic Human needs is measured by: Nutrition and Basic Medical Care, Water and Sanitation, Shelter, Personal Safety. The indicators of Foundations of Wellbeing dimension are: Access to Basic Knowledge, Access to Information and Communications Health and Wellness, Ecosystem Sustainability. Finally, the Opportunity dimension is measured by Personal Rights, Personal Freedom and Choice, Tolerance and Inclusion, Access to Advanced Education.
In 2015, social progress is higher in North America, Australia, Northern Europe, while the worst performing countries are mostly located in Africa.

India
As for the Social Progress Index, in 2015 India ranks 101st. Its performance is better in the Opportunity dimension (91st), while it is weaker both in the Basic Human Needs (101st) and in the Foundations of Well Being (113) dimensions.
The relative strengths of the country are related to:
• a good higher education
• low homicide rate
• low obesity rate
• good enforcement of private property rights.

The relative weaknesses of India are:
• bad household air pollution
• high perceived criminality and political terror
• low adult literacy rate
• high premature deaths and suicide
• scarce freedom of assembly and religion
• early marriages
• very low tolerance (for immigrants, religious)
• education (few women’s average years in school, high inequality in attaining education).
Ethiopia
In the Social Business Index 2015, Ethiopia ranks 126th, with bad performances in the Opportunity and Foundation of Wellbeing dimensions (both 126th) and a slightly better performance in the Basic Human Needs dimension (120th).
Relative strengths of the country are:
- good access to electricity
- good life expectancy rate
- low obesity rate
- high satisfied demand for contraception.

Relative weaknesses of Ethiopia are:
- undernourishment
- high food deficit
- bad rural access to improved water source
- high homicide rate
- weak upper secondary enrollment
- low access to ICTs (mobile telephone subscriptions, internet users)
- very weak personal rights (political rights, freedom of speech, freedom of assembly, freedom of religion)
- inequality in the attainment of education.

2.4 Human Development Index
Development of a country has been measured for a long time only by GDP and GDP growth. Nevertheless, in many cases, GDP growth has not resulted in socioeconomic development. This is why, in the last decades, more emphasis has been laid on a wider approach to development that also
includes some basic social development factors.

The Human Development Index is the expression of a new vision on social and economic development that is based on the actual growth of wellness of a population, rather than on the GDP growth alone. To assess the development of a country, the HDI uses three dimensions of human development: health, education, economic development, that are measured by life expectancy rate at birth, a basic literacy among the population (mean of years of schooling for adults aged 25 years and expected years of schooling for children of school entering age) and GDP per capita PPP. Even if HDI is a very useful tool in order to understand the development path of a country as a whole, it still doesn’t give information on some important issues such as inequalities, poverty or empowerment, even if a deep understanding of a country’s development would require it.

Figure 17 - Human Development Index 2014

India

United Nations Human Development Report 2014 shows that India is a medium human development country, since it ranks 135th, while India’s HDI value in 2013 is 0.586 (slightly growing on the previous year), life expectancy is 66.4 and GDP per capita PPP is five times more than Ethiopia. Mean years of schooling in India are very low (4.4) Looking at the last decades, we may see that India started to grow during the 1980s and that its growth has been stable and continuos, except for a slowdown from 2011 to 2013.

Ethiopia

Ethiopia still is a low human development country and ranks 173rd. Ethiopia’s HDI value is 0.435 (even in this case, showing a scarce growth on 2012) and life expectancy is 63.6, mean years of schooling are 2.4. During the last decades, Ethiopia has steadily grown on an average rate of 3.35%. From 2000 to 2013, Ethiopia shows an higher growth with respect to India and from 2008 to 2013 it gained two positions in the HDI global ranking.

3. Health in India and Ethiopia

How we have seen Health is a fundamental element of poverty and development for a country. India and Ethiopia have signed the Millennium Development Goals (MDG). Both countries are specially committed to reaching the goals with respect to maternal and child survival.
The MDG target for Maternal Mortality Ratio (MMR) is 140 per 100,000 live births. From a baseline of 560 in 1990, India had achieved 220 in 2010 and 190 in 2013, and at this rate of decline is estimated by Indian government to reach an MMR of 141 by 2015. In Ethiopia MMR is 420 in 2013. This rate is very high considering that the target of MDG is 140, but the trend is positive. In fact Ethiopian MMR in 2010 was 500. (Tab.1)

Tab.1 - Maternal Mortality Ratio (MMR)

<table>
<thead>
<tr>
<th>Country</th>
<th>2010</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethiopia</td>
<td>500</td>
<td>420</td>
</tr>
<tr>
<td>India</td>
<td>220</td>
<td>190</td>
</tr>
</tbody>
</table>

Source: World Bank data

For under-5mortality rate (U5MR), the MDG target is 42. From a baseline of 126 in 1990, in 2013 India has an U5MR of 53 and an extrapolation of this rate would bring it to 42 by 2015. This is particularly creditable on a global scale where in 1990 India’s MMR and U5MR were 47% and 40% above the international average respectively. (Tab. 2)

In Ethiopia we observe a very interesting positive trend. The U5MR is decreased by 16% from 2010 to 2013, even a better performance if compared to India (where is also decreased, but only 12%). In both countries, data show that mortality rate under 5 among children whose mothers are uneducated is twice the rate of mortality among children whose mothers had a basic education.

Tab.2 - Mortality Rate Under-5 (U5MR)

<table>
<thead>
<tr>
<th>Country</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethiopia</td>
<td>76</td>
<td>71</td>
<td>68</td>
<td>64</td>
</tr>
<tr>
<td>India</td>
<td>60</td>
<td>58</td>
<td>55</td>
<td>53</td>
</tr>
</tbody>
</table>

Source: World Bank data

With a current population of about 1.2 billion people and continued population growth, India is expected to surpass China by 2030 and become the world’s most populous nation\(^5\). India has shown consistent improvement in population stabilization, with a decrease in decadal growth rates, both as a percentage and in absolute numbers. Twelve of the 21 large States for which recent Total Fertility Rates (TFR) is available, have achieved a TFR of at or below the replacement rate of 2.1\(^6\) and three are likely to reach this soon. The challenge is now in the remaining six states, but even here rates are declining. However these six States between them account for 42% of the national population and 56% of the annual population increase. (Tab. 3) In the remaining small States and Union Territories except Meghalaya, the Crude Birth Rate (CBR), is less than 20 per 1000. The national TFR has declined from 2.6 to 2.5 (2010/2013). The persistent challenge on this front is the declining sex ratio. In India the rate of decline of still-births and

\(^5\) [http://www.healthpolicyproject.com/index.cfm?id=country-india](http://www.healthpolicyproject.com/index.cfm?id=country-india)

neonatal mortality has been lower than the child mortality on the whole\(^7\). Ethiopia has also seen a little reduction in the CBR from 35 in 2013 to 33 in 2013. Concerning the Total Fertility Rate in the African country we observe a slight decrease of 8%, but the absolute value remains very high, in comparison to the world average. (Tab. 4)

Tab. 3 - Total Fertility Rate (TFR)

<table>
<thead>
<tr>
<th>Country</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethiopia</td>
<td>4.9</td>
<td>4.8</td>
<td>4.6</td>
<td>4.5</td>
</tr>
<tr>
<td>India</td>
<td>2.6</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
</tr>
</tbody>
</table>

*Source: World Bank data*

Tab. 4 - Birth Rate

<table>
<thead>
<tr>
<th>Country</th>
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<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethiopia</td>
<td>35</td>
<td>34</td>
<td>34</td>
<td>33</td>
</tr>
<tr>
<td>India</td>
<td>21</td>
<td>21</td>
<td>21</td>
<td>20</td>
</tr>
</tbody>
</table>

*Source: World Bank data*

In India life expectancy at birth (Tab. 5), that is stable since from 2010, is 66 years, with significant differences between different states (in Kerala life expectation is 74 years, in Madhya Pradesh it is 58 years). In Ethiopia, instead, we record a small increase from 2010 (61 years): in 2013, life expectancy at birth is 64 years.

Tab.5 - Life Expectancy

<table>
<thead>
<tr>
<th>Country</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethiopia</td>
<td>61</td>
<td>62</td>
<td>63</td>
<td>64</td>
</tr>
<tr>
<td>India</td>
<td>66</td>
<td>66</td>
<td>66</td>
<td>66</td>
</tr>
</tbody>
</table>

*Source: World Bank data*

The vaccination rate in India is 61%\(^8\), rising to 72% (Tab. 6) if we consider access to some kind of vaccination. In India vaccination rate is higher in urban areas (58%) than in rural areas (39%)\(^9\). With respect to immunization, in Ethiopia in 2013 72% of children have been immunized (+ 18% in three years).

Health indicators in Ethiopia are among the worst in Africa (newborn mortality rate is 6.8% and mortality rate for children under 5 is 10.6%). Only 17% of women delivers in an hospital (African percentage is 46%)\(^10\). Ethiopian Demographic and Health Survey (Edhs) highlights that very few women are assisted during delivery by health professional. Customer satisfaction rate for health services is the lowest in the world (19%)\(^11\), even if the diffusion of health services generally improved thanks to the Health Sector Development Program started in 1998. Since then, there have

\(^7\) MHFW, 2014.

\(^8\) Only 61% of children (12-23 months) in 2012 have been fully immunized.

\(^9\) MHFW, 2014.


been many improvements (for example, vaccination rate increased); nevertheless, health system as a whole is still very weak.

Tab. 6 - Immunization

| Immunization, DPT (% of children ages 12-23 months) |
|---------------------------------|--------|--------|--------|--------|
| Country                        | 2010  | 2011  | 2012  | 2013  |
| Ethiopia                       | 61    | 65    | 69    | 72    |
| India                          | 72    | 72    | 72    | 72    |

*Source: World Bank data*

India's progress on communicable disease control is mixed. The most acclaimed success of this period is the complete elimination of polio. In Leprosy too there have been significant reductions, but after a reduction of an annual incidence of 120,000 cases, there is stagnation, with new infective cases and disabilities being reported. In AIDS control, progress has been good with a decline from a 0.41% prevalence rate in 2001 to 0.27% in 2011, but this still leaves about 2.100,000 persons living with HIV, with about 116,000 new cases and 148,000 deaths in 2011. Performance in disease control programmes is largely a function and reflection of the strengths of the public health systems. Where there are sub-critical human resource deployment, weak logistics and inadequate infrastructure, all national health programmes do badly. This was one of the important reasons of the launch of the National Rural Health Mission\(^{12}\), which was geared to strengthen health systems. National Health Programmes for chronic diseases are very limited in coverage and scope, except perhaps in the case of the Blindness control programme.

Over the last two decades Ethiopia has taken strong measures to address the epidemic, as a result of which HIV incidence has declined by 90 per cent (Fig.18). Following the approval of the declaration on HIV/AIDS known as Resolution 60/262 in June 2006 during the United Nations General Assembly, Ethiopia accepted the Resolution. A ‘Multi-sectoral Plan of Action for Universal Access to HIV Prevention, Treatment, Care and Support in Ethiopia, 2007–2010’ has been developed and implemented. The responses to the HIV/AIDS epidemic showed considerable progress and achieved encouraging results. The adult prevalence rate, in fact, has also declined from 2.4 per cent in 2009/10 to 1.3 per cent in 2012/13.

However, the nature of the epidemic and its fuelling factors creates a complex challenge to the ability of health and other sectors to meet the targets for HIV/AIDS control in Ethiopia.

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\(^{12}\) The National Rural Health Mission (NRHM), launched in April 2005, led to a significant strengthening of public health systems. It brought in a workforce of close to 900,000 community health volunteers, the ASHAs, who brought the community closer to public services, improving utilization of services and health behaviors. The NRHM deployed over 18,000 ambulances for free emergency response and patient transport services to over a million patients monthly, added over 178,000 health workers to a public system that had depleted its workforce to sub-critical levels over a long period of neglect. Across States, there were major increases in outpatient attendance, bed occupancy and institutional delivery. However these developments were uneven and more than 80% of the increase in services is likely to have been contributed by less than 20% of the public health facilities. Inefficiencies in fund utilization, poor governance and leakages have been a greater problem in some of the weaker states. Much of the increase in service delivery was related to select reproductive and child health services and to the national disease control programmes, and not to the wider range of health care services that were needed.
The prevalence rate is 1.7% for males and 2.6% for females.

Figure 18 - percentage of people ages 15-49 who are infected with HIV

This creates additional problems because With 90,000 HIV-positive pregnant women, there are an estimated 14,000 HIV-positive births and a total of 28,000 AIDS death and an estimated 800,000 AIDS orphans annually.

Today, based on a single point estimate of Health Policy Project, there are nearly 1.2 million people living with HIV/AIDS in Ethiopia.

The conditions of the health system both in India and in Ethiopia show great differences between urban and rural areas.

With 17% of the world’s population, India accounts for 20% of the diseases on a global basis, for 20% of maternal mortality and for 25% of child mortality under 5 years. Among equally developed countries in the same area, health indicators in India are much worse and even higher inequalities may be seen within the country.

There are urban-rural inequities and there are inequities across states and regions. A number of districts, many in tribal areas, perform poorly even in those states where overall averages are improving. Marginalized communities and poorer economic quintiles of the population continue to fare poorly.

In both countries, Rapid and unplanned urbanization has led to massive growth in the number of the urban poor population, especially those living in slums. This section of the population has poorer health outcomes due to adverse social determinants and poor access to health care facilities, despite living in close proximity to many hospitals - public and private. There is almost no arrangement for primary care in many cities and towns. A technical resource group has examined the urban health situation at length and suggested measures needed to address the most vulnerable and marginalized sections of the urban poor and the way forward in convergence, but now the problem is not solved.

The Indian government shows its full awareness of the inadequacy of the country's health system and its desire to adapt it in the National Health Policy 2015.

In fact, The National Health Policy 2015 is a declaration of the determination of the Government to leverage economic growth to achieve health outcomes and an explicit acknowledgement that better health contributes immensely to improved productivity as well as to equity.

The primary aim of the National Health Policy, 2015, is to inform, clarify, strengthen and prioritize the role of the Government in shaping health systems in all its dimensions - investment in health, organization and financing of healthcare services, prevention of diseases and promotion of good
health through cross sectoral action, access to technologies, developing human resources, encouraging medical pluralism, building the knowledge base required for better health, financial protection strategies and regulation and legislation for health. The National Health Policy of 1983 and the National Health Policy of 2002 have guided the approach for the health sector in the Five-Year Plans and for different schemes. Now 13 years after the last health policy, the context has changed in four major ways. Firstly- Health Priorities are changing. As a result of focused action over the last decade we are projected to attain Millennium Development Goals with respect to maternal and child mortality. The second important change in context is the emergence of a robust health care industry growing at 15% compound annual growth rate (CAGR). This represents twice the rate of growth in all services and thrice the national economic growth rate. Thirdly, incidence of catastrophic expenditure due to health care costs is growing and is now being estimated to be one of the major contributors to poverty. The drain on family incomes due to health care costs can neutralize the gains of income increases and every Government scheme aimed to reduce poverty. The fourth and final change in context is that economic growth has increased the fiscal capacity available.

3.1. Health Economic and Human Resources
Yearly health expenses per person (Tab. 7) in Ethiopia amounts to 25 $, that is much lower with respect to the minimum health expense recommended by the World Health Organization for the developing countries. In India it amounts to 61S in 2013, that, despite being more than twice the Ethiopian per capita expenditure, is still much lower than the minimum health expense recommended by the WHO (in the United States, health expenditure per capita is $ 9,146).

<table>
<thead>
<tr>
<th>Country</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethiopia</td>
<td>15</td>
<td>18</td>
<td>22</td>
<td>25</td>
</tr>
<tr>
<td>India</td>
<td>54</td>
<td>61</td>
<td>58</td>
<td>61</td>
</tr>
</tbody>
</table>

Source: World Bank data

In Ethiopia and even more in India the failure of public investment in health to cover the entire spectrum of health care needs is reflected best in the worsening situation in terms of costs of care and impoverishment due to health care costs. All services available under national programs are free to all and accessed with fairly good rates of coverage. India has one of the largest programs of publicly financed ART drugs for HIV anywhere in the world. All drugs and diagnostics in all vector borne disease programs are free. This is also true for all of immunization and much of the pregnancy related care. Also due to the selective approach, several essential services especially for chronic illness is not easily obtainable resulting in physical and financial hardship and poor quality of care.

Yet if health care costs in India are more impoverishing than ever before, almost all hospitalization even in public hospitals leads to catastrophic health expenditures, and over 63 million persons are faced with poverty every year due to health care costs alone, it is because there is no financial protection for the vast majority of health care needs. In 2011-12, in India, the share of out of pocket expenditure on health care as a proportion of total household monthly per capita expenditure was 6.9% in rural areas and 5.5% in urban areas. This led to an increasing number of households facing catastrophic expenditures due to health costs (18% of all households in 2011-12 as compared to 15% in 2004-05). In Ethiopia long-term trends in health access and health gains show dramatic
improvements in the past 10 years. The Government has shown the political commitment and leadership, which has resulted enhanced responsiveness to community health needs. As a result, Ethiopia has achieved multi-front health gains including the achievement of the MDG 4 on child mortality three years ahead of the target date. The overall gain has led to increased life expectancy for both men and women, which is a key component of the human development index.

Tab.8 - Number of Health Facilities in Ethiopia

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Hospitals</td>
<td>11</td>
<td>127</td>
</tr>
<tr>
<td>Health Centres</td>
<td>519</td>
<td>3,100</td>
</tr>
<tr>
<td>Health Posts</td>
<td>4,211</td>
<td>16,048</td>
</tr>
</tbody>
</table>

Source: MoFED data

The basis for accelerated improvement in health has been the rapid growth in the construction of health facilities, the training of health professionals and the budgetary resources allocated to the sector. The Government has been making strong efforts to expand and provide health services at all levels. Between 2005 and 2013, the number of health centres increased from 519 to 3,100, and public hospitals rose from 11 to 127. The number of medical schools increased from 5 to 25 in the same period.

Despite everything that we said, public health expenditure (%) of both countries, however, has remained essentially unchanged over time.

Figure 19 - Health expenditure, public (% of total health expenditure)

In connection with the economic impact of health expenditure of which it has been discussed previously, in India a number of publicly financed health insurance schemes were introduced to improve access to hospitalization services and to protect households from high medical expenses.\textsuperscript{13}

\textsuperscript{13} The Central Government under the Ministry of Labour & Employment, launched the Rashtriya Swasthya Bima Yojana (RSBY) in 2008. The population coverage under these various schemes increased from almost 55 million people in 2003-04 to about 370 million in 2014 (almost one-fourth of the population). Nearly two thirds (180 million) of this population are those in the Below Poverty Line (BPL) category. Evaluations show that schemes such as the RSBY, have improved utilization of hospital services, especially in private sector and among the poorest 20% of households. However there are other problems. One problem is low awareness among the beneficiaries about the
The Indian health Private Sector, engaging and supporting the growth of the health care industry, is an important element of public policy. The private health care industry is valued at $40 billion and is projected to grow to $ 280 billion by 2020 as per market sources. The private health care industry is complex and differentiated. It includes insurance and equipment, which accounts for about 15%, pharmaceuticals which accounts for over 25%, about 10% on diagnostics and about 50% is hospitals and clinical care. The Government has had an active policy in the last 25 years of building a positive economic climate for the health care industry. In any case, today, only 10% of Indian population has an health insurance and health services are commonly paid out-of-pocket (India 58%). The population of Ethiopia will appeal more to public health than Indian population, paying health expenditure out of pocket just for the 35%.

World Health Organization set the medical standards that require 25.4 health workers each 10,000 inhabitants; in India there are 11.9 health workers each 10,000 inhabitants and there are huge differences among states and between urban and rural areas. Indian government tried to intervene, especially in the rural areas, by training women from 25 to 45 who received at last 8 years of education. Each of them serves as community health worker by providing basic health services to about 1,000 people. In Ethiopia is been made a Health Development Army (HAD). A Health Development Army has also been formed as a means to meet priorities set in the Health Sector Development Program and Growth and Transformation Plan. The Army consists of 2,026,474 one-to five peer networks that have been established nationwide. Priority is given to mass mobilization in pastoral areas. During last ten years, medical, nursing and technical education increased. Currently most have little orientation to rural service or any public services, and the teaching standards are very varied with sub-optimal skill sets requiring extensive in-service training subsequently. The challenge for future Indian health program is to guide the expansion of educational institutions to provide skilled health workers to where they are needed most, and with the necessary skills. In Ethiopia the number of health posts rapidly increased to reach 16,048 in 2013, up from 4,211 in 2005 and 6,191 in 2006. At present, the Government is planning to expand the health service system further through constructing more than 15,000 health posts, 3,056 health centres, and 800 new primary hospitals\textsuperscript{14}.

<table>
<thead>
<tr>
<th>Tab. 9 - Healthcare Workforce Standards in Ethiopia</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Healthcare Workforce Standards</strong></td>
</tr>
<tr>
<td><strong>Indicators</strong></td>
</tr>
<tr>
<td>Health Workforce Density</td>
</tr>
<tr>
<td>Physicians</td>
</tr>
<tr>
<td>Nurses</td>
</tr>
<tr>
<td>Midwives</td>
</tr>
</tbody>
</table>

*Source: MoFED data*

\textsuperscript{14} MoFED

entitlement and how and when to use the RSBY card. Another is related to denial of services by private hospitals for many categories of illnesses, and over supply of some services.
The Indian Department of Health Research was established in 2006 to strengthen Indian efforts in health research. Much of its results are delivered though the research institutions that come under the Indian Council of Medical Research. Simultaneously research support to medical colleges across the country is being strengthened to ensure their engagement in research. There have been significant contributions made by the Department, but modest funding of less than 1% of all public health expenditure has resulted in limited progress.

Despite years of strong economic growth in India and increased Government health spending in the 11th Five Year plan period, the total spending on healthcare in 2011 in the country is about 4.0% of GDP, lower than percentage Ethiopian equal to 5.1%.

Tab. 10 - Health Expenditure

<table>
<thead>
<tr>
<th>Country</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethiopia</td>
<td>4.9</td>
<td>5.2</td>
<td>4.9</td>
<td>5.1</td>
</tr>
<tr>
<td>India</td>
<td>3.8</td>
<td>3.8</td>
<td>3.8</td>
<td>4.0</td>
</tr>
</tbody>
</table>

*Source: World Bank data*

Global evidence on health spending shows that unless a country spends at least 5–6% of its GDP on health and the major part of it is from Government expenditure, basic healthcare needs are seldom met. While it is important to recognize the growth and potential of a rapidly expanding private sector, international experience (as evidenced from the table 11) shows that health outcomes and financial protection are closely related to absolute and relative levels of public health expenditure.

Tab. 11 - Health Indicators

<table>
<thead>
<tr>
<th>Country</th>
<th>Health Exp. Per Capita</th>
<th>Health Exp. % GDP</th>
<th>Govt. Health Exp (% of total H. Exp)</th>
<th>Life Expect. At birth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethiopia</td>
<td>25</td>
<td>5.1</td>
<td>61</td>
<td>64</td>
</tr>
<tr>
<td>India</td>
<td>61</td>
<td>4.0</td>
<td>32.2</td>
<td>66</td>
</tr>
<tr>
<td>Thailand</td>
<td>264</td>
<td>4.6</td>
<td>80.1</td>
<td>74</td>
</tr>
<tr>
<td>BRICS Country</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brazil</td>
<td>1,083</td>
<td>9.7</td>
<td>48.2</td>
<td>74</td>
</tr>
<tr>
<td>OECD Countries</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italia</td>
<td>3,155</td>
<td>9.1</td>
<td>78</td>
<td>82</td>
</tr>
<tr>
<td>Japan</td>
<td>3,966</td>
<td>10.3</td>
<td>82.1</td>
<td>83</td>
</tr>
<tr>
<td>USA</td>
<td>9,146</td>
<td>17.1</td>
<td>47.1</td>
<td>79</td>
</tr>
</tbody>
</table>

*Source: World Bank data*

Out of the developing countries in Table 11, two countries (Brazil and Thailand) are considered to have almost achieved universal health coverage. Thailand has almost the same total health expenditure as India but its proportion of public health expenditure is 77.7% of total health expenditures (which is 3.2% of the GDP) and this is spent through a form of strategic purchasing in
which about 95% is purchased from public health care facilities which is what gives it such a high efficiency. Brazil spends 9% of its GDP on health but of this public health expenditure constitutes 4.1% of the GDP (which is 45.7% of total health expenditure).

With respect to the health budget in Ethiopia, the Health expenditures per capita (Fig. 20) have been rising for a longer period, but especially rapidly since the mid-2000s, reaching in 2013 the 25$. Total health expenditures on GDP are 5.1%, of which 61% are public health expenditure, against 32.2% of India.

Figure 20 - Health expenditure per capita (current US$)

National health policies, as you can see from the table 11, appear to have significant repercussions on the life expectancy of the populations.

India is the world’s third largest economy in terms of its Gross National Income (in PPP terms) and has the potential to grow larger and more equitably, and to be considered as one of the developed countries of the world. India today possesses as never before, a sophisticated arsenal of interventions, technologies and knowledge required for providing health care to its people. Yet the gaps in health outcomes continue to widen. On the face of it, much of the ill health, disease, premature death, and suffering we see on such a large scale is needless, given the availability of effective and affordable interventions for prevention and treatment. “The reality is straightforward. The power of existing interventions is not matched by the power of health systems to deliver them to those in greatest need, in a comprehensive way, and on an adequate scale”.

3. Education in India and Ethiopia

Education of human resources and their management is a fundamental tool of development. Long-term trends indicate that encouraging progress in educational attainment has been made in Ethiopia and in India. In particular, the expansion of education in the last 10 years has been fairly good.

15 MHFW, 2014.
While the recent expansion of education has taken place at all levels, the Governments have made particular efforts towards universal primary education. There are unfortunately no substantial time series in order to better evaluate the increase, but even the existence of the data today has great significance. Anyway, the situation of the two countries analyzed, in absolute value, is still hard for the Education, just look at the Years of schooling of 2012 amounted to 4.4 for India and 2.4 for Ethiopia, against 11.7 of Indians expected years of schooling and 8.5 Ethiopians (Tab.12)

Tab. 12 - HDI Ethiopia - India

<table>
<thead>
<tr>
<th>HDI rank</th>
<th>Country</th>
<th>Human Development Index (HDI) Value, 2013</th>
<th>Life expectancy at birth (years), 2013</th>
<th>Mean years of schooling (years), 2012</th>
<th>Expected years of schooling (years), 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>173</td>
<td>Ethiopia</td>
<td>0.435</td>
<td>63.6</td>
<td>2.4</td>
<td>8.5</td>
</tr>
<tr>
<td>135</td>
<td>India</td>
<td>0.586</td>
<td>66.4</td>
<td>4.4</td>
<td>11.7</td>
</tr>
</tbody>
</table>

Source: World Bank data

3.1 Literacy

Literacy rate in Ethiopia is better than the average of African countries, but it still remains at a very low level. Even though the government’s education strategy set the objective of spreading an universal primary education in the country before 2015, the target is still very far. Primary school is free, but it is not compulsory, so the decisions about children’s education is completely left to the families, that often prefer children to come and help in their working activities. In case of baby girls, they are often forced to get married even if they are very young. So, even if Ethiopian government seems to be aware of the importance of education in the development process of the country, times for implementing its programs (also due to the bureaucracy) are often too slow and this requires some kind of support. Definitely more Ethiopians are attending school, especially in rural areas. As revealed in the 2011 Welfare Monitoring Survey (WMS)\(^\text{16}\), literacy rates have risen since 2004 from 37.9 per cent to 46.7 per cent in 2011. Literacy rates in Ethiopia are on target for males but lower than expected for females, even when taking into account levels of income. This is occurring despite major improvements in literacy for both sexes since the mid-2000s. Overall, the female literacy rate has increased from 27 to 47 per cent between 2004 and 2012, and male literacy from 49 to 63 per cent\(^\text{17}\). (Tab. 13)

In India, the Ministry of Human Resource Development and its Department of School Education and Literacy is starting to improve education in rural areas, by building new schools and paying adequate salaries to the teachers, but corruption affecting the country makes these initiatives often

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\(^{17}\) Unicef Data.
worthless, since teachers don’t go to the forest schools and children cannot undergo an adequate education process.
The Youth literacy rate – Percentage of population aged 15–24 years who can both read and write with understanding a short simple text, is between 2008 and 2012 88 for male and 74 for female. Indeed, education index in India grew during the last 12 years, but its average value is still 4.4 years.
Even though Indian government is committed in improving the education system, its strategy is not perfectly working and this makes individuals and associations essential for implementing education programs. Education for disabled children is also a big issue: public schools are very crowded and disabled children cannot receive a proper education. Furthermore, religious and cultural beliefs make disabled children’s access to education even more difficult.

Tab. 13 - Youth Literacy Rate

<table>
<thead>
<tr>
<th>Country</th>
<th>male</th>
<th>female</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethiopia</td>
<td>63</td>
<td>47</td>
<td>2008-2012</td>
</tr>
<tr>
<td>India</td>
<td>88</td>
<td>74</td>
<td>2008-2012</td>
</tr>
</tbody>
</table>

Source: Unicef statistical data

3.2 School participation
As part of expanding educational opportunities over the past two decades, net enrollments in primary school have almost tripled since monitoring began in the 90s. Currently, in Ethiopia about 65 per cent of female primary age children are attending primary school and 64% of male, while in India are 85% of male and 82% of female (Tab. 14). Large variations were observed at the regional level, with some regions or states at or above the national average, while others lagged behind.

Tab. 14 - Primary School Participation

<table>
<thead>
<tr>
<th>Country</th>
<th>male</th>
<th>female</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethiopia</td>
<td>64</td>
<td>65</td>
<td>2008-2013</td>
</tr>
<tr>
<td>India</td>
<td>85</td>
<td>82</td>
<td>2008-2013</td>
</tr>
</tbody>
</table>

Source: Unicef statistical data

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Secondary school enrollment has risen too, but it remains quite low, especially in rural areas, and among the poorest groups. Only in the last five years did the gender gap start decreasing at this level of education.

Secondary school net attendance ratio is the number of children attending secondary or tertiary school who are of official secondary school age, expressed as a percentage of the total number of children of official secondary school age. This ratio confirms that the participation to secondary school is very low mostly for Ethiopians people. In fact, in Ethiopia, only 16% of children attend school. In India this share is higher, but for females it does not exceed 50% (Tab. 15).

Tab. 15 - Secondary School Participation

<table>
<thead>
<tr>
<th>Secondary school participation – Net attendance ratio (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country</td>
</tr>
<tr>
<td>Ethiopia</td>
</tr>
<tr>
<td>India</td>
</tr>
</tbody>
</table>

Source: Unicef statistical data

In India and in Ethiopia, encouraging progress in educational attainment has been made and the expansion of education in the last 10 years has been impressive and it has taken place at all levels. Ethiopian Government started trying to improve the quality of education through the School Improvement Program launched under the General Education Quality Improvement Program (GEQUIP). This program intends to improve students’ performance by creating a conducive school environment, improving the school facilities, using tutorial classes and so on.

The issues related to literacy of the population also emerge from other data, such as possession of the mobile phone and internet usage.

India, today new and great technological power, shows a large gap between the percentage of phone users (71%) and the percentage of Internet users (15%), which suggests that the word is still the first element of communication (Tab. 16 – 17). In Ethiopia the two values are very low, but this is caused not only by the lack of literacy, even by the weak technological development, the lack of telephone and internet network in most of the territory.

Tab. 16 - Mobile phone users

<table>
<thead>
<tr>
<th>Mobile phones per 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country</td>
</tr>
<tr>
<td>Ethiopia</td>
</tr>
<tr>
<td>India</td>
</tr>
</tbody>
</table>

Source: Unicef statistical data

Because of the inclusion of secondary-school-aged children attending tertiary school, this indicator can also be referred to as a secondary adjusted net attendance ratio.
Many Ethiopians and Indians are at least getting basic education, which, by itself, is a significant achievement. However, it should be noted that there is still a very high level of illiteracy, over 37 million Ethiopians and 250 million Indians cannot read and write, and the most of them are adults.
Multi-sector collaboration is needed for curriculum development for promoting adult education. The Ethiopian Government, for example, provided educational instruction to 3.5 million adults in 2012/13 and planned to double that number in 2013/14.

3.3 Education Economic and Human Resources

Anyhow, the expansion in access to and enrollment in education is a necessary but not a sufficient condition to ensure the knowledge and skills that will enable this countries to create more productive employment. There are multiple factors that come into play in this, including quality of education, employment opportunities, and the necessary environment in order to create or expand productive employment. The Governments, primarily wanting to push the economic development of countries, are trying to improve the quality of education. With this objective, the Ethiopian government launched the School Improvement Program Financed under the General Education Quality Improvement Program (GEQUIP). This program lays the ground-work for improvements in student performance. Examples include the creation of a conducive school environment, the improvement of school facilities, the use of cluster resource centers, tutorial classes, student peer networking, and greater participation via student parliaments/councils.

Both states have increased the government expenditures to improve the education and its quality. Examples include the mass hiring of new teachers that has led to the reduction in pupil-teacher ratios from 66:1 in 2004/05 to 49:1 in 2012/13 for primary education, and from 51:1 to 29:1 for secondary education in Ethiopia. In the same period, In India and In Ethiopia, the proportion of qualified primary school teachers increased with qualified women. The Ethiopian government expenditure per student (Tab. 18) is in 2010 equal to 19.2% of GDP per capita, while Indian government spends per student in 2010 7.2%, value increased in 2011 to 9%.

<table>
<thead>
<tr>
<th>Gov. expenditure per student, primary (% of GDP per capita)</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethiopia</td>
<td>19.2</td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>7.2</td>
<td>9.0</td>
</tr>
</tbody>
</table>

Source: World Bank data

The government expenditure on total education (Tab. 19) decrease slightly in 2012, rising from 3.3% in 2010, to 3.9% in 2011 and 3.8% of GDP in 2012. This expenditure is greater in Ethiopia (4.7%)21.

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20 MoFED Data.
21 World Bank Data.
The total government expenditure on education in percentage of government expenditure (Tab. 20), in Ethiopia, has a very significant value. In fact the 24.4% of total government expenditure is dedicated to education system. This value shows clearly the commitment that the government of Ethiopia has chosen to have regard to the education of its population. The same thing can not be said for the Indian government, which spending in education is consistently low (12.9 in 2012 and 2013).

Both India and Ethiopia lack a wide education strategy and territorial inequalities in education are still evident between rural and urban areas and between male and female. By and large, however, the main determinants of inequity and exclusion from education lie outside the classroom: poverty and food insecurity; child labour both at home and commercially; long distances to schools (especially to secondary schools); gender disparities and in particular early marriage; and the lack of continuous access for children from pastoralist families. The recent narrowing of the education gap, as we have seen before, has contributed to the observed narrowing in the gender wage gap. On average, differences in education explain a significant fraction of the variation in productivity, wages and incomes among adults. Moreover, in their roles as mothers, educated women pass on the benefits of higher education to their children. A World Bank study (World Bank, 2012a) states that education has a big and good influence on human development and health, in fact children born to more educated mothers are less likely to die in infancy and more likely to have higher birth weights and be fully immunized.
5. Feasible solutions

From vicious circle of poverty to virtuous circle of development

In economics, the cycle of poverty is the "set of factors or events by which poverty, once started, is likely to continue unless there is outside intervention." The cycle of poverty has been defined as a phenomenon where poor families become trapped in poverty for at least three generations. These families have either limited or no resources. There are many disadvantages that collectively work in a circular process making it virtually impossible for individuals to break the cycle. This occurs when poor people do not have the resources necessary to get out of poverty, such as financial capital, education, or health. In other words, poverty-stricken individuals experience disadvantages as a result of their poverty, which in turn increases their poverty.

The great risk is that the poor remain poor throughout their lives. This cycle has also been referred to as a "pattern" of behaviors and situations which cannot easily be changed. The poverty cycle is usually called "development trap" when it is applied to countries. Economic growth has been seen by some researcher as the virtuous circle, but in our opinion this is not correct, because economic development is necessary but not sufficient. Our virtuous circle of sustainable human development is composed from the following factors: living standard, education, health, quality and persistence. The last two factors are indispensable to complete the development circle, because they introduce the right way to drive the development. Quality is an important factor on which development must rely and it has to permeate the entire development strategy of countries.

Persistence is a fundamental factor in every development process to achieve long-time sustainability. These two factors are positive objectives of a country’s development strategy, as well as good living standards, good health and good education. Moreover, to follow a sustainable and balanced development path, it is necessary to implement a strategy that allows the coexistence of all the virtuous circle’s factors. The lack of just one of these factors, as shown by history, causes the circle to become vicious, ignoring the problems more than solving them.

The development model to which a government must necessarily aim is, therefore, a complex, complete, balanced and sustainable development model. We have two fundamental actors for sustainable human development: Sustainable Development State and Civil Society.

Sustainable Development State

Although the term “Developmental State” has been used to refer to state-led economic planning as experienced in some of the countries of East Asia and elsewhere since the 1970s, serious attempts at conceptualizing it are said to have begun with the work of Chalmers Johnson in the 1980s. The Developmental State model is defined as an ideological orientation that promotes the ideal agenda of development and its institutional arrangements in the formulation and implementation of policies and programs.

A Sustainable Developmental State, in simple terms, must be a state that tends to be a strong player in the three dimensions of economy, health and education of a nation, trying to put together economic, social and human development.

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22 Bura R., What is the meaning of 'vicious circle of poverty'? http://www.preservearticles.com/2012042631242/what-is-the-meaning-of-vicious-circle-of-poverty.html
The Ethiopian State, in the past decade, and the Indian State, in the past twenty years have given high priority to achieving specific goals that directly promote human development and inclusive growth; they also enhanced primary health and education access and services, gender equality, job creation and provision of basic economic and social infrastructure, such as electricity, roads, telecommunications and potable water. Furthermore, governments have been investing in economic and social infrastructure, streamlining the public service, revamping the tax collection system, and supporting small and medium enterprises.

All of these policy and institutional frameworks determined very small gains in HDI rank: Ethiopia gained 1 position and India gained 2 positions. Surely, both countries need more time. Development policies require long time perspectives and great synergies between states and civil society.

It needs a strategy that will see the government works on national policies with a top-down system and civil society works on the territories, in coordination with state, with a bottom-up system. The ‘Sustainable Development State’, that is a Sustainable Human Development State, still needs to be theoretically defined and has to find an adequate application in the poorest countries.

**Civil Society**

In order to support governments in the development strategy, civil society can play a fundamental role.

Civil society should not take the place of governments, but it must support governments so that national policies may also reach the most far areas, by combining a traditional top-down approach to development to a new one bottom up.

Social, human and economic growth may arise from the involvement of civil society, particularly in the most marginalized areas of the country, since one of the main issues in the analyzed countries is related to the lack of professionals.

In our opinion, if the planning of a development process governments were able to include individuals from civil society, represented in different ways, and foreign capital and innovative knowledge to the start-up phase, would be able to achieve at the same time results in the short term.

Civil society could also be an important instrument to train the new skills, through foreign professionals supported by foreign capitals, in many essential services (community health workers, community education worker, community worker architecture, community planning worker, etc). This way, local manpower could be trained to manage international tools for development benefitting new capabilities and the knowledge on international tools.

India and Ethiopia are caught up in vicious cycle of poverty, because they lack the coexistence of growth of the three factors of the poverty cycle.

Lack of education does not allow the increase in income that does not help in the protection of the health especially in those countries where the government does not ensure free health care.

Overcoming the barriers of poverty in these countries certainly requires a concentrated effort on many fronts and a 'big-push' is required to transform the 'poverty vicious cycle' into a 'development virtuous circle'.

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