

LmunA 2022

Research report

Forum: General Assembly 4
Issue: The question of technological development on increasing the gap between MEDCs and LEDCs
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LMUNA

Lorentz Lyceum
Model United Nations
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Introduction

For quite a long time, the gap between more economically developed countries (MEDCs) and less economically developed countries (LEDCs) has been an issue. Now, with the quick developments in digital devices and technology, this issue grows and becomes more important, because the world relies on these digital devices and this technology.

Many of the LEDCs suffer from poverty-related issues and are, for example, unable to feed their people, provide education to the children, or provide proper sanitation and healthcare. Because of the absence of good infrastructure, the market is damaged, eventually leading to more economic issues. We can find solutions to these problems in technology, but because the MEDCs have had a head start with developing digital devices, it is nowadays nearly impossible for the less economically developed countries to catch up on their own.

In this Research Report and in the debates during Lorentz Model United Nations Arnhem we are going to focus on the gap between MEDCs and LEDCs and on this year's topic: Emerging technologies in shaping modern society. Emerging technologies are growing to have a bigger impact on the way we live, work and socialise with each other in our day-to-day life. We are going to look at the effects of these technologies on the already existing gap between MEDCs and LEDCs.

Definitions of key terms

MEDC

MEDC is an abbreviation for 'More Economically Developed Country'. MEDCs typically have a lower birth rate and a lower death rate compared to LEDCs. They also have more access to digital devices due to more infrastructure and higher investments on technology.

LEDC

LEDC is an abbreviation for 'Less Economically Developed Country' and is also defined as a developing country or a third-world country. Many LEDCs produce raw materials for the world and they do not all have access to digital devices and good technology, due to their infrastructure and less investments on technology.

Digital Divide

The gap between demographics and regions that have access to modern information and communications technology (ICT), and those that don't or have restricted access.

ICT

ICT is an abbreviation for 'Information and Communications Technology' and refers to the technology used for regular, everyday tasks. Examples are: sending an email, searching the internet, using a mobile phone, computer or tablet, etc.

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Structural transformation

Structural transformation is the process of moving resources from low productivity to higher productivity and skill-intensive sectors, thereby setting development and economic catch-up in motion.

General overview

According to Bob Allen, professor of economic history at Oxford University, technological change is the fundamental cause of economic growth. When we look at the 16th and 17th centuries, we see that since then, the economies of richer countries have grown faster than the economies of others. This is because the MEDCs have had the people and materials for technological development, but also because of their colonial past. Their economies grew, they developed and the MEDCs have achieved structural transformation in a matter of decades. In the LEDCs, this was not the case. The MEDCs had a head start compared to the former colonies. The lack of structural transformation in LEDCs has led to an economical gap between MEDCs and LEDCs. With the quick development of technology in the MEDCs, this gap increases, making it harder for LEDCs to catch up on their own every day.

Both soft and hard infrastructures, such as electricity, high-speed and reliable internet and digital skills are needed before certain technologies can be used. In the Least Developed Countries (LDCs) 52.8% of the population did not have access to electricity as of 2019, whilst the global average was 90.1%. This makes certain systems and new technologies unavailable, resulting in less efficient work and lesser production.

Improving the infrastructures of these countries is needed when we look for a solution to fixing the gap between MEDCs and LEDCs caused by technology and digital devices. For example, the number of people suffering from starvation and famine in LEDCs can be reduced by decreasing the number of crops that die before they are harvested. This can be achieved by using different materials, such as new fertilisers and pesticides, and different farming techniques. By improving their farming infrastructure, they can avoid famine and starvation for their people.

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Major parties involved

Japan

Japan is currently the most technologically advanced country in the world. Their science and technology are the reason for Japan's rapid economic growth and development and Japan is a global leader in robotics, natural sciences, aerospace exploration and biomedical research areas.

China

Not only has the technology and science in China grown rapidly since the 1980s and is the country a world leader in some areas, but China also helps different countries in Africa by improving their technology. Huawei has for example worked together with Zambia's telecom operator and rolled out the African nation's first 5G network. China has played and still plays a very big role in the development of the digital economy in Africa.

LEDCs, for example, Niger

Niger is nowadays known as the least developed country. In the late 19th century the French began to colonise Niger and Niger only gained independence in 1960. Niger's economy is based largely on subsistence crops, livestock, and some of the world's largest uranium deposits. There is a great lack of structural transformation.

LEDCs, for example, Mali

Just like Niger, Mali was a French colony from the late 19th century until 1960. Nowadays, Mali belongs to the 10 poorest nations of the world. Their economy is based upon agriculture. The less economically developed countries are also a major party in this issue since they are the countries that struggle with keeping up with the technological development in the more economically developed countries.

LEDCs, for example, Burundi

From 1890 until 1962, Burundi was colonised by Germany. Burundi's economy heavily depends on agriculture. Burundi itself is a landlocked country lacking resources and with almost nonexistent industrialisation.

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Timeline of Key Events

- | | |
|-----------------|---|
| 1963 | The UN conference on Science and Technology for the benefit of LEDCs is held in Geneva, in order to address the approaching gap between LEDCs and MEDCs as a result of technological development. |
| 1971 | The UN Conference on Trade And Development (UNCTAD) holds an intergovernmental meeting to discuss the transfer of technology to LEDCs. |
| 1993 | The UN Conference on Science and Technology for Development is met for the first time in New York. |
| 2003
nations | Resolution 58/200 on science and technology for development to urge to help in the distribution of technology. |
| 2004 | Resolution 59/220 is adopted by the GA in order to reaffirm the potential of technology in both information and communication to foster economic development |
| 2005 | In order to reaffirm the previous relevant agreements, resolution 60/205 is adopted by the GA. |
| 2006 | Resolution 62/201 to reestablish the necessity to take action on the matter. (Similar resolutions are adopted in 2007 and 2009) |
| 2011
of | Resolution 66/211 is passed to facilitate the diffusion and implementation of modern technology in countries where it is needed. |

Previous attempts to solve the issue

As stated before in the Timeline of Key Events, there have been multiple UN conferences in an attempt to solve this issue. Also, countries, for example, China, have invested in technology in developing countries. Technology will eventually bridge Third World Countries with the rest of the world and make them more approachable, but there is still a lot to be done.

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Possible solutions

There are multiple possible solutions to the issue of the increasing gap between LEDCs and MEDCs caused by technology and digital devices. As aforementioned, one of these solutions is improving the infrastructure of LEDCs. As World Bank lead economist Andrew Burns noted: "Weak basic infrastructure systems limit the range of technologies that can be employed in many countries. Policies should ensure that critical enabling services such as roads and electricity are widely available, whether delivered by the private or public sector. In Sub-Saharan Africa, just 8% of the rural population has access to electricity". Improving the capacity to absorb foreign technology is critical in low-income countries that have exploited low-wage comparative advantages, rather than strengthened domestic competencies.

In order to implement many new technologies, not only does the infrastructure of LEDCs needs to improve, but also the education systems. This is because the workers need to be educated in order to operate new machines. LEDCs could implement modern technology in their education, because this would provide exposure to the mass amount of information on the Internet, thus opening up many new opportunities for the students.

Also, by narrowing the digital divide and implementing digital technologies in LEDCs the economy profits since this creates more jobs for the people in the LEDCs. They do so by helping all people work better and learn better. Studies on the impact of mobile internet availability on jobs in Nigeria, Senegal and Tanzania have shown that digital technologies lead to more and better jobs for lower-income, lower-skilled people, and hence reduce poverty.

Further reading

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- 2) <https://paperzz.com/doc/9004062/question-of-technological-development-in-ledcs>

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Question of technological development in LEDCs

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Technology is the key to transforming least developed countries. Here's how

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Technology gap between rich and poor nations remains large – study

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Committee: Economic and Social Council Agenda A ... - mimun2019.weebly.com

In 2011, about 13.5% of the African population had Internet access. While Africa accounts for 15.0% of the world's population, only 6.2% of the world's Internet subscribers are Africans. Africans who have access to broadband connections are estimated to be in percentage of 1% or lower. In 2018, users

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The Meaning of ICT

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The difference between MEDCs and LEDCs

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