Forum: Special Conference on Balancing Infinite Opportunities (SPECON)

Issue: Exploring the implementation of bonded scholarship programs in

Less Economically Developed Countries (LEDC's)

Student Officer: Christos Tomasso Kefaleas

Position: Deputy President



Personal Introduction

My name is Christos Tomasso Kefaleas, an 11th grade student in the Deutsche Schule Athen (DSA) and I welcome you to the 8th American College of Greece Model United Nations (ACGMUN). Over the past year, I have had the privilege of participating in various MUN conferences, which have deepened my understanding of global issues and sharpened my skills in diplomacy and debate. At ACGMUN, I will serve as the Deputy President of the Special Conference, a role that allows me to encourage discussions and guide delegates in addressing some of the most pressing challenges of our time. My MUN career started in the 10th grade in the 26th annual Deutsche Schule Athen Model United Nations Conference (DSAMUN), as the delegate of Afghanistan in SPECON. To now be a Deputy President of the same committee I had my first ever conference in is a privilege for me.

Throughout the conference I will guide you to understand the topic of "Exploring the implementation of bonded scholarship programs in Less Economically Developed Countries (LEDCs)" and help you engage in fruitful debate.

If you have any questions do not hesitate to send me an email at ctkef1@gmail.com

Topic Introduction

Programs known as "bonded scholarships" are organized efforts that offer financial aid to students in Less Economically Developed Countries (LEDCs) in exchange for the recipients' promise to work in their home nation for a predetermined amount of time following graduation. These initiatives are intended to increase access to higher education for those who might not have the funds to do so on their own and to guarantee that the information and skills gained are used to boost the local economy. Bonded scholarships seek to close the gap between educational aims and financial

limitations by giving gifted individuals the chance to pursue higher education, eventually producing a workforce with greater skills that can support national development objectives.

Since brain drain is still a problem in LEDCs, the establishment of linked scholarship programs is especially important. After completing their education or training, many highly qualified professionals leave their home countries in search of better job prospects overseas, robbing their nations of important human capital. By providing incentives for graduates to stay and work in their home countries, bonded scholarship programs act as a calculated intervention to buck this trend. By doing this, these initiatives match educational expenditures with important labour market demands, guaranteeing that industries like healthcare, engineering, and education have access to locally skilled workers who are aware of the particular difficulties faced by their regions.

Furthermore, bonded scholarship programs are becoming more and more relevant as LEDCs work to achieve sustainable growth by enhancing human capital, reducing dependence on external aid and promoting self sufficiency. By providing governments and organizations with a focused approach to workforce development, these programs lessen reliance on outside knowledge while encouraging domestic creativity and leadership. But putting such initiatives into action is not without its challenges. Important factors that need to be properly managed include ensuring compliance, resolving possible opposition from graduates looking for opportunities abroad, and coordinating scholarship commitments with changing economic demands.

To preserve the integrity and efficacy of these systems, ethical issues pertaining to individual liberty and the possibility of exploitation must also be addressed. In the end, investigating the establishment of bonded scholarship programs in LEDCs necessitates a sophisticated comprehension of the long-term national goals, policy design, and socioeconomic environment. While these programs present a promising solution to the challenges of skill retention and economic development, their success depends on well-structured frameworks that balance individual aspirations with national interests.

Definition of Key Terms

- 1. **Brain Drain**¹ The emigration of highly skilled professionals from LEDCs to developed countries, leading to talent shortages in their home nations.
- 2. **Bonded Scholarship Programs**² Financial aid programs that require recipients to work in their home country for a specified period after graduation to address labor shortages.
- 3. Less Economically Developed Countries (LEDCs)³ Nations with lower industrialization, income levels, and infrastructure, often struggling with limited educational and economic opportunities.
- 4. **Economic Stability**⁴ A condition where a country experiences steady economic growth, low unemployment, and controlled inflation, which bonded scholarships aim to support.
- 5. **Workforce Development**⁵ Strategies to enhance the skills and education of a country's labor force to improve productivity and innovation.
- 6. **Public Sector Employment**⁶ Jobs within government-run organizations, often prioritized in bonded scholarships to fill essential roles like healthcare and engineering.
- 7. **Labor Market**⁷ The supply and demand for workers within an economy, affected by education accessibility and skilled worker retention.
- 8. **Expatriate Expertise Reliance**⁸ Dependence on foreign professionals to fill critical job positions due to a lack of qualified local workers.

¹ Investopedia. "Brain Drain." Investopedia, 5 Dec. 2023, www.investopedia.com/terms/b/brain_drain.asp.

² Cudy. "Why They Stay: Reasons Scholars Continue Beyond Their Bond." *Cudy Blog*, <u>blog.cudy.co/why-they-stay-reasons-scholars-continue-beyond-their-bond/</u>.

³ "Less Economically Developed Country (LEDC)." Oxford Reference, Oxford University Press, www.oxfordreference.com/display/10.1093/acref/9780199599868.001.0001/acref-9780199599868-e-1066.

⁴ "Economic Stability." United Nations Economic and Social Commission for Western Asia (ESCWA), www.unescwa.org/sd-glossary/economic-stability.

⁵ "What Is Workforce Development?" Generation, www.generation.org/news/what-is-workforce-development/.

⁶ "Public vs. Private Sector: What's the Difference?" *Indeed*, <u>www.indeed.com/hire/c/info/public-vs-private-sector</u>.

⁷ Investopedia. "Labor Market." *Investopedia*, 5 Dec. 2023, <u>www.investopedia.com/terms/l/labor-market.asp.</u>

⁸ "Expatriate Experience." Fiveable, library fiveable me/key-terms/american-literature-since-1860/expatriate-experience.

- 9. **Remittances**⁹ Money sent back home by emigrants, which supports national economies but does not compensate for lost local expertise.
- 10.**Industrial and Technological Development**¹⁰ The process of improving a country's industries and technology sectors, requiring an educated workforce.
- 11. Infrastructure Development¹¹ The expansion of essential facilities like roads, energy systems, and healthcare, often hindered by skilled worker shortages.
- 12. **Sustainable National Development**¹² Long-term economic and social progress that ensures self-sufficiency and reduced reliance on external aid or talent.
- 13. **Higher Education Accessibility**¹³ The ability of students, especially from disadvantaged backgrounds, to attend and complete university studies.
- 14. **Macroeconomic Stability**¹⁴ A country's ability to maintain balanced growth and finances, influencing government support for education programs.
- 15. **Education for Sustainable Development (ESD)**¹⁵ A UN-backed initiative integrating education into broader social, economic, and environmental goals.

Background Information

Education is one of the most important factors of a nation's development and has a significant impact on the economy and innovation as well as on the social plane. However, in Less Economically Developed Countries (LEDCs), the quality of higher education is unattainable owing to costly education, inadequate infrastructure and poor academic guidance. Therefore, there are many bright students who

⁹ Ratha, Dilip. "Remittances." International Monetary Fund (IMF), www.imf.org/external/pubs/ft/fandd/basics/pdf/ratha-remittances.pdf

^{10 &}quot;Technology Development." ScienceDirect, www.sciencedirect.com/topics/social-sciences/technology-development.

¹¹ "Infrastructural Development." Indeed, ca.indeed.com/career-advice/career-development/infrastructural-development.

¹² "National Sustainable Development Strategies." *United Nations Sustainable Development*, sustainabledevelopment.un.org/topics/nationalsustainabledevelopmentstrategies.

¹³ "Accessibility in Higher Education." Parcel Pending, www.parcelpending.com/en-us/blog/accessibility-in-higher-education.

¹⁴ "Macroeconomic Stabilization." *United States Institute of Peace (USIP)*, www.usip.org/guiding-principles-stabilization-and-reconstruction-the-web-version/sustainable-economy/macroeconomi.

¹⁵ "Education for Sustainable Development (ESD)." *Plymouth University*, <u>www.plymouth.ac.uk/students-and-family/sustainability/sustainability-education/esd.</u>

cannot afford to attend university while those who do are likely to seek job abroad, which increases the brain drain hypothesis, a phenomenon which suggests that the migration of highly skilled individuals from developed countries to developing countries negatively impacts the home country by depleting its human capital. This not only impacts vital areas like health, technology, and learning but also hampers the overall development of the nation.

To solve these problems, bonded scholarship programs have been proposed as a possible solution. These programs offer financial assistance to students in return for a promise to practice in their home countries for a certain period after graduation. In this way, bonded scholarships serve a dual purpose: they provide a life-changing opportunity for education to students while at the same time helping to address the shortage of skilled workers in LEDCs. When properly administered, these initiatives can assist in meeting important labor needs, support long-term economic stability, and decrease reliance on expatriate experts.

The Challenges of Higher Education in LEDCs

Limited Government Funding for Education

Many countries have limited budgets, which they allocate to other more pressing needs leaving education unfunded. As a result, universities are endowed with outdated facilities, inadequate instructors, and poor learning environments. This greatly affects the quality of education to be offered, hence discourages students from further studies.

Inability of Public Universities to Meet Demand

However, the public universities are still not in a position to meet the increasing demand for tertiary education, which results in large crowds in the classes and general deterioration of the learning environment. Private universities may be better equipped but they are expensive and therefore beyond the reach of many students. Countries such as Bangladesh and Haiti are illustrative of this challenge since students in rural areas have restricted access to higher education because of the limited number of universities and high costs of transportation. In Bangladesh, most top universities are concentrated in cities like Dhaka, forcing rural students to either relocate or forget higher education altogether. Similarly, in Haiti, poor infrastructure and long travel distances further restrict university access, leading to way lower enrollment rates. This leads to a clear distinction between the rates of completion of

secondary education and rates of participation in university education, which prevents many talented students from getting the skills that are required for them to work as professionals.

Financial Barriers to Higher Education

Other constraints such as costs hinder students in LEDCs from accessing higher education. Sometimes, families cannot afford to pay for tuition fees, textbooks, and other expenses, and this makes many students dropout of school or work to support themselves. This results in low completion rates especially among the disadvantaged society, which further restricts the number of qualified workers in the labor market.

In some countries, there are scholarship opportunities but they are very competitive or they do not cover all the expenses that a student incurs in school. Nevertheless, it is possible that scholarships provided do not cover for other essentials such as accommodation, transport and others, which makes it difficult for the students from poor backgrounds to stay in college. The higher order drop out rates are observed in sub Saharan Africa and Southern Asia due to economic reasons. Hence, lacking enough financial support, many students are unable to finish their courses and affect the workforce and, therefore, economic development.

The Brain Drain Phenomenon

This is one of the biggest problems that affect the LEDCs as the trained personnel are attracted to the developed countries. Due to limited job opportunities, low salaries, and poor working conditions in their home countries, university graduates usually look for jobs in other countries where they can earn more and have better career opportunities. This phenomenon is particularly detrimental to the areas of health, engineering, teaching, and information technology which depend on skilled personnel.

In addition, the departure of skilled workers causes important labor shortages that hinder LEDCs to maintain essential services and infrastructure development. However, remittances from the expatriates bring in the much needed cash to the home countries but they do not help in the retention of the expertise and innovation that these professionals could have offered to the country. Hence, the problem of brain drain has to be solved in order to ensure sustainable national development.

Such programs have been previously used in countries for instance South Africa where government funded scholarships for medical students have been used to deal with the shortage of

doctors in rural areas. For instance, Malaysia has the Public Service Department Scholarship which allows students to choose fields such as engineering and law, and in return, the students must work for the public sector after graduation. These initiatives not only increase the rates of university enrollment but also guarantee that there will be enough qualified workers in important areas.

Economic growth and the development of the workforce are accelerated by bonded scholarships because they ensure that LEDCs have a sufficient number of highly educated people to support industrial and technological development. Only the educated workforce can increase productivity, creativity and form new business strategies. This in turn leads to higher rates of economic growth, job creation and the attenuation of reliance on expatriate expertise.

For instance, Rwanda has made strategic decisions in offering bonded scholarships to ICT students, which have led to the emergence of the technology sector. Local software engineering has been trained and retained, and Rwanda has emerged as a new player in the field of digital innovation in Africa. In the same manner, Brazil's Science Without Borders program has enhanced the national research capacity by supporting STEM students to contribute to the development of the country's science and industry after returning back home.

Major Countries and Organizations Involved

Equatorial Guinea

Equatorial Guinea has bonded scholarship programs as a strategic measure to address critical skill shortages in vital areas for national progress, such as healthcare and infrastructure. The nation has suffered from the inability of qualified professionals in the past, especially in the medical and engineering fields, which are key in improving public services and economic development. In response, the government has introduced bonded scholarship programs to pay for the education of students in these important fields, but only on the condition that they agree to work for the country for a certain period after completing their education.

The bonded scholarship initiative of Equatorial Guinea has first and foremost been directed towards the improvement of the healthcare sector. Realizing the shortage of trained health personnel and the challenges in providing the desired health care to the population, bonded scholarships have been used to induce students to study medicine and other related courses abroad, with a view to

having them come back to help meet the health needs of the country. In the same manner, the engineering field has been identified as crucial in order to support the country's infrastructure development strategies including construction of roads, energy facilities and urbanization. The initiative aims to reduce the country's dependence on foreign expertise and to ensure that local talent helps in the sustainable development of the nation. However, issues such as compliance with work commitments and providing appealing working conditions have been major drawbacks to the program.

India

India has established bonded scholarship programs mainly in the healthcare sector to tackle the severe shortage of medical professionals, especially in rural and underserved locations. The nation encounters a considerable imbalance in healthcare availability, with rural areas frequently lacking adequate medical resources and personnel. To address this challenge, several Indian states have launched scholarship programs that offer financial aid to medical students on the condition that they work in public health facilities, usually in rural settings, for a specified duration after graduation.

These initiatives aim to ensure that trained healthcare professionals serve in the public sector instead of pursuing more profitable positions in private organizations or overseas. For example, government-supported medical colleges often require students to enter into a bond agreement that specifies a service period of two to five years in rural healthcare settings. Noncompliance with these commitments leads to financial penalties or legal repercussions. The bonded scholarship approach has played a vital role in enhancing the presence of doctors in isolated regions, addressing critical health issues, and increasing overall healthcare accessibility. However, in spite of these advantages, obstacles persist regarding enforcement, as certain graduates choose to pay fines rather than meet their service obligations. Furthermore, challenges such as insufficient infrastructure, reduced salaries, and difficult working conditions in rural health facilities have resulted in discontent among medical graduates, influencing the long-term efficacy of the program.

United Nations

The United Nations (UN) has an important part in supporting education as a human right, and in contributing to the achievement of sustainable development. The UN has been involved in education programs in Less Economically Developed Countries (LEDCs) through different approaches and its specialized agencies with an aim of closing the education gaps and guaranteeing equity in access to education. The other important framework promoted by the UN is the Education for Sustainable

Development (ESD) which means integrating education into more general development interventions so that it contributes to the achievement of social, economic and environmental goals. The UN systems support bonded scholarship programmes indirectly by supporting policies that are geared towards access to education and by encouraging member states to implement policies that are in line with Sustainable Development Goal (SDG) 4 which is quality education. Other international organizations like the United Nations Educational, Scientific and Cultural Organization (UNESCO) assist LEDCs in the technical and policy advice and capacity building for the formulation and implementation of education programs that are in conformity with national development priorities. The UN does not directly finance bonded scholarships, but its advocacy and policy guidance make governments adopt such models as part of their national development strategies.

World Bank (WB)

The World Bank (WB) is an important financial and technical partner for LEDCs in the education sector, offering financial, research and policy support to enhance access and quality of education. The WB is providing financial support for scholarship programs such as bonded scholarships in the process of its larger strategy to enhance human capital in developing countries. Knowing well the importance of education in economic development, the WB works with the national governments to design specific scholarship programs that are relevant to the labor market and the development agenda. The World Bank also goes beyond the financial support to undertake thorough research on educational trends, skill shortage and workforce development needs in the LEDCs. This research is used in the formulation of the scholarship programs to ensure that the problems that are unique to each country are addressed. For instance, the WB supports initiatives that seek to improve the education facilities, teaching staff, and the rates of participation in higher education especially for the needy. Also, the WB points out the importance of monitoring and evaluating the bonded scholarship programs to check whether they are achieving the desired goals of skill retention and country development. However, there are difficulties in the implementation of bonded scholarships which include; financial plans, compliance with work obligations, and the need to balance personal and national career paths. The World Bank still promotes policies that support equitable and environmentally friendly education solutions for LEDCs.

International Monetary Fund (IMF)

The International Monetary Fund (IMF) is the latter but is primarily concerned with macroeconomic stability and financial policy. LEDCs' education initiatives are also greatly enhanced by the IMF's funding and policy recommendations. The IMF offers financial support to governments

and often does this as part of overall economic development packages that include education and human capital development. A well educated workforce is seen as vital for economic growth, productivity improvements and the reduction of poverty and thus the organization encourages member states to suffice for the education sector.

The IMF, in its economic policy advice, helps governments to develop sustainable financing of education, including bonded scholarships. The IMF seeks to promote fiscal policies that support investment in human capital so that educational initiatives can be sustained without overburdening government budgets. Additionally, the IMF offers technical assistance to assist LEDCs in the development of appropriate budgetary frameworks that would enable these countries to allocate their resources between education and other important sectors such as health and infrastructure. The IMF's role in education is mostly indirect but its influence on national policy frameworks is substantial to have on the implementation of bonded scholarship programs. However, there is a problem of ensuring that education funding is constant especially in countries that are economically unstable or are in debt crises. The IMF remains to push for long term investment in education as a key contributor to economic resilience and social development, with proper planning and resource management.

South Africa

South Africa has been actively involved in the implementation of bonded scholarship programs as a way to address the educational and skills gaps in the country, particularly in underdeveloped rural areas. The South African government offers scholarships in critical sectors such as healthcare, engineering, and teaching through various initiatives, such as the National Student Financial Aid Scheme (NSFAS)¹⁶. These scholarships often come with the condition that recipients must work in rural or underserved communities for a certain number of years after graduation. The goal is to combat the shortage of skilled professionals in these areas, which has been a barrier to the country's development. Additionally, partnerships with universities and international bodies like the World Bank have helped expand these programs and ensure their sustainability, contributing to human capital development in South Africa.

¹⁶ "National Student Financial Aid Scheme (NSFAS)." NSFAS, South African Government, www.nsfas.org.za.

Brazil

Brazil has implemented bonded scholarship programs through several government initiatives, such as the ProUni (University for All Program)¹⁷ and the Science Without Borders Program¹⁸. These programs target economically disadvantaged students, providing full scholarships for higher education in exchange for working in public service or other underserved regions. The ProUni program, for instance, allows students to study at private universities with the condition that they work in underserved areas once they graduate, helping to address regional disparities in education and healthcare. Brazil has also used these programs to combat the urban-rural divide, where there is often a shortage of professionals like doctors, engineers, and teachers. By tying educational funding to national development needs, Brazil aims to create a more equitable and sustainable model of growth.

Rwanda

Rwanda has integrated bonded scholarships into its post-genocide recovery strategy, focusing on sectors crucial to the nation's rebuilding efforts, such as education, health, and infrastructure. The Rwanda Education Board¹⁹, in collaboration with both local universities and international donors, offers scholarships to students from disadvantaged backgrounds with the stipulation that they return to work in rural or underdeveloped areas after graduation. These programs are designed to combat the shortage of skilled workers in key sectors by ensuring that graduates serve in regions where their expertise is most needed. Rwanda's commitment to rebuilding its human capital is evident in its approach to bonded scholarships, where recipients are expected to contribute to the country's long-term development and reconciliation process, particularly by addressing local challenges in health, education, and governance.

Malaysia

Malaysia's bonded scholarship programs have been central to the country's efforts to develop a skilled workforce, especially in fields such as medicine, engineering, and technology. The Malaysian government, through agencies like the Public Service Department (JPA)²⁰, offers scholarships to students in exchange for a commitment to serve in the public sector or with government-linked companies for a specified period. These programs are designed to ensure that Malaysia does not rely

¹⁷ "ProUni – University for All Program." *Ministry of Education of Brazil*, www.acessounico.mec.gov.br/prouni.

¹⁸ "Science Without Borders." Estudo no Exterior, <u>www.estudonoexterior.com/science-without-borders</u>.

¹⁹ Rwanda Education Board (REB)." Government of Rwanda, www.reb.rw.

²⁰ "Public Service Department (JPA) Scholarships." Public Service Department of Malaysia, www.jpa.gov.my

too heavily on foreign expertise, but rather develops its own skilled professionals to address national needs. The Malaysian model emphasizes practical application, with students often required to return to work in rural or underserved areas after their studies. This approach has been successful in tackling issues of regional disparity, particularly in the public health and education sectors, while also reducing brain drain and building a self-sufficient workforce.

Blocs Expected

Alliance 1: LEDCs

Bonded scholarship programs are a pivotal mechanism for retaining skilled workers and improving education in less economically developed countries (LEDCs). These programs offer an opportunity for talented individuals to pursue higher education without the burden of financial strain, which can otherwise limit access to quality education. By requiring a commitment to work in the country after graduation, bonded scholarships ensure that these skilled professionals remain within their national workforce, helping to counteract the brain drain that is a significant challenge in many LEDCs. In addition to benefiting individual students, these programs are integral to national development, as they help foster a well-educated workforce that is essential for driving economic growth, technological innovation, and the development of critical sectors like healthcare, engineering, and education.

Moreover, bonded scholarship programs play a vital role in reducing inequality within LEDCs. By offering scholarships to students from underprivileged backgrounds, these programs level the playing field, providing opportunities that would otherwise be unavailable. As these graduates return to their home countries and contribute their skills, they not only help fill critical gaps in the labor market but also inspire future generations to pursue education, breaking the cycle of poverty and inequality. In this context, these programs are not just a form of investment in individual futures, but also in the long-term socio-economic stability and prosperity of entire nations.

Alliance 2: MEDCs

While bonded scholarship programs may appear beneficial in theory, the long-term sustainability of such programs in LEDCs raises several concerns, particularly regarding human rights and personal freedom. The obligation to work for a set period in exchange for an education may infringe upon individuals' autonomy and their right to choose their career path. Forcing graduates to remain in a particular country or sector can lead to dissatisfaction and potential exploitation, as these individuals

may feel trapped in jobs they did not freely choose. This kind of enforced labor commitment may not align with international human rights standards, particularly those related to freedom of movement and employment.

Furthermore, the effectiveness of bonded scholarship programs in addressing the systemic issues faced by LEDCs is questionable. While they may help retain skilled workers in the short term, they do not tackle the root causes of underdevelopment, such as inadequate access to quality education, poor infrastructure, and insufficient job opportunities. By focusing on individual solutions rather than structural reforms, bonded scholarship programs may fail to create the systemic change needed to improve national conditions. Additionally, these programs could inadvertently perpetuate inequality by limiting opportunities for those who do not have access to these scholarships, leaving certain segments of the population behind. The focus should therefore shift towards creating inclusive, sustainable education systems and job markets that do not rely on forced work commitments but instead foster voluntary engagement and long-term societal growth.

Timeline of Events

Date	Description of Event
October 24, 1945	The United Nations was founded. The UN later emphasizes the importance of education in its mandate, leading to the adoption of the Universal Declaration of Human Rights ²¹ which states that everyone has the right to education
1970s	The first bonded scholarship programs are introduced in countries like India and other LEDCs to address skills shortages in critical sectors such as healthcare and engineering. Specific dates for individual programs are less documented but are widely implemented during this decade.
December 10, 1984	The UN General Assembly adopts the International Covenant on Economic, Social and Cultural Rights ²² , reinforcing the right to

²¹ "Universal Declaration of Human Rights." *United Nations*, www.un.org/en/about-us/universal-declaration-of-human-rights.

²² "International Covenant on Economic, Social and Cultural Rights." United Nations Treaty Collection, treaties.un.org/doc/treaties/1976/01/19760103%2009-57%20pm/ch iv 03.pdf

	Pierce – The American College of Greece Model United Nations 202 education and encouraging countries to promote access to
	education.
1985	India begins its bonded scholarship program for medical students to address a shortage of healthcare professionals in rural areas. This program requires students to work in rural healthcare facilities for several years after graduation.
November 2000	UNESCO launched the Education for All (EFA) ²³ initiative during the World Education Forum in Dakar, Senegal, calling for improved educational access in developing countries and laying the groundwork for programs like bonded scholarships.
October 2005	The UN General Assembly declares the Decade of Education for Sustainable Development (2005-2014), encouraging countries to promote sustainability through improved access to education, which includes initiatives such as bonded scholarships.
September 25, 2015	The United Nations adopts the Sustainable Development Goals (SDGs), including Goal 4 ²⁴ : Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. Bonded scholarship programs are seen as a potential tool to address education and workforce gaps in LEDCs.
June 2016	The World Bank releases a report highlighting the role of bonded scholarship programs in improving access to education and addressing workforce gaps in LEDCs. The report encourages the scaling of these programs to further economic development.
April 2019	The World Bank publishes a global education report, stating that scholarship programs, including bonded scholarships, can

²³ "Education for All." UNESCO-UNEVOC TVETipedia Glossary,

unevoc.unesco.org/home/TVETipedia+Glossary/show=term/term=Education+for+all.

24 "Sustainable Development Goal 4 (SDG4)." UNESCO, www.unesco.org/sdg4education2030/en/sdg4.

	improve access to education in low-income countries, and
	recommending their expansion as part of development policies.
May 2020	The World Bank publishes an updated report on global education trends, emphasizing that LEDCs that have implemented bonded scholarship programs show improved retention of skilled workers in essential sectors.

Relevant UN Resolutions, Treaties & Events

Universal Declaration of Human Rights (UDHR)²⁵

Scholarship programs on bonded scholarships support the Universal Declaration of Human Rights (UDHR) by supporting the right to education in Article 26 that calls for free and universal education for all. These programs help students in Less Economically Developed Countries (LEDCs) to eliminate the monetary barriers to higher education and make access to higher education dependent on merit and not on economic status. However, as of now, there is conformity with the UDHR's objective of educational equality, a major issue that has been raised is to do with personal freedom, specifically with regards to the mandatory work commitment which could be seen to limit the right of an individual to choose his or her line of work. Therefore, while bonded scholarships are a good way of extending educational opportunities, they have to be designed in a manner that is compatible with both education and labor rights.

International Covenant on Economic, Social and Cultural Rights (ICESCR)²⁶

The International Covenant on Economic, Social and Cultural Rights (ICESCR) continues the right to education and calls for guarantee of non-discriminatory access through measures like scholarships. Bonded scholarship programs fulfill this mandate by helping disadvantaged students meet their educational costs and, in the process, help meet the country's workforce needs. However, the ICESCR also protects labor rights and that raises a question about whether post-graduation work commitments might be coercive. To comply with this framework, bonded scholarship programs must

²⁵ "Universal Declaration of Human Rights." *United Nations*, www.un.org/en/about-us/universal-declaration-of-human-rights.

²⁶ "International Covenant on Economic, Social and Cultural Rights." United Nations Treaty Collection, treaties.un.org/doc/treaties/1976/01/19760103%2009-57%20pm/ch iv 03.pdf

ensure that graduates get a fair wage, good working conditions, and the right to drop out under reasonable conditions, while also respecting national priorities on development and individual rights.

Education 2030 Framework for Action²⁷

The Education 2030 Framework for Action emphasizes the need for education systems to be aligned with labor market demands, making bonded scholarships a strategic tool for economic development. These programs directly contribute to the framework's goal of increasing higher education access while ensuring that graduates enter essential sectors such as healthcare, engineering, and education. However, the framework also stresses voluntary participation in education and employment, meaning that bonded scholarship programs should not impose rigid restrictions on students' career choices but rather provide incentives that encourage, rather than force, compliance with work commitments.

Paris Agreement (COP21)²⁸

As the Paris Agreement (COP21), is mainly about climate action, it notes the significance of capacity-building in LEDCs, which bonded scholarship programs can help by steering students to the fields which are most important for environmental sustainability. Many LEDCs battle problems such as sea level rise, deforestation, and extreme weather, which means LEDCs need climate scientists, renewable energy experts, and sustainably designed infrastructure. This expertise can be built up with bonded scholarships that guarantee that the investment in education goes into the building of national resilience. Nevertheless, to align fully with the Paris Agreement sustainable development objectives, these programs should focus on eco-friendly industries and receive international funding to help alleviate the financial pressures on developing nations.

Sustainable Development Goals (SDGs)

Scholarship programs on bonded scholarships are related to several Sustainable Development Goals (SDGs) which are SDG 4²⁹, Quality Education, SDG 8³⁰, Decent Work and Economic Growth, and SDG 10³¹, Reduced Inequalities. These programs make higher education accessible to low-

²⁷ "Education 2030: Incheon Declaration and Framework for Action for the Implementation of Sustainable Development Goal 4." UNESCO Institute for Statistics, uis.unesco.org/sites/default/files/documents/education-2030-incheon-framework-for-action-implementation-of-sdg4-2016-en 2.pdf.

²⁸ "The Paris Agreement." United Nations Framework Convention on Climate Change (UNFCCC), unfccc.int/process-and-meetings/the-paris-agreement.

²⁹ "Sustainable Development Goal 4 (SDG4)." UNESCO, <u>www.unesco.org/sdg4education2030/en/sdg4</u>.

³⁰ "Goal 8: Decent Work and Economic Growth." United Nations Sustainable Development Goals, sdgs.un.org/goals/goal8.

³¹ "Goal 10: Reduced Inequality." United Nations Sustainable Development Goals, sdgs.un.org/goals/goal10.

income students, thus supporting social mobility and workforce development in LEDCs. They also solve skill shortages in the important industries and ensure the stability and growth in the long run. Nevertheless, to meet the SDG principles to the full extent, bonded scholarships should avoid the situation where students are exploited and work commitments are real benefits that help to combine the needs of the national workforce with the desires of individuals.

Previous Attempts to Solve the Issue

The World Bank Education Initiative (2000s)³²

The World Bank Education Initiative of the 2000s was aimed at enhancing access to quality education globally especially in the Less Economically Developed Countries (LEDCs) through financial support, policy guidance and infrastructure development. Bonded scholarship programs are consistent with this initiative, since they provide financial support to students from disadvantaged backgrounds to pay for higher education, while also filling in workforce gaps in important areas like healthcare, engineering and education³³. However, while the World Bank supports the opening of the educational system, it also stresses on economic freedom, which poses a question as to whether work commitments, which are a part of the scholarships, do not limit career mobility. Therefore, for bonded scholarships to be in harmony with World Bank recommendations, they must be a form of financial assistance that does not limit the graduates' career path in some way.

European Union's Erasmus+ Program³⁴

The European Union's flagship initiative, the Erasmus+ Program, promotes mobility in education, training, and youth by providing scholarships and international exchange programs. Erasmus+ is different from bonded scholarships in that it does not bind participants to work for a certain period after graduation. The core principle of enhancing education as a tool for social and economic development is closely aligned with that of Erasmus+. From Erasmus+, bonded scholarship programs in LEDCs can learn elements of mobility, skill building, and career development of students while making them contribute to their home countries after graduation. However, while Erasmus+ guarantees academic freedom, bonded scholarships are only binding to graduates to fulfill contractual obligations,

³² "The Global Partnership for Education and the World Bank Group: The Facts." World Bank, www.worldbank.org/en/topic/education/brief/the-global-partnership-for-education-and-the-world-bank-group-the-facts.

³⁴ "Erasmus+ Programme." European Commission, erasmus-plus.ec.europa.eu/.

so it needs careful structuring to stay clear of potential human rights abuses while reaping maximum national development dividends.

African Union's Continental Education Strategy for Africa (CESA)³⁵

The Continental Education Strategy for Africa (CESA) launched by the African Union seeks to enhance education systems across the continent to support sustainable development. One of the major objectives of CESA is workforce alignment, which means that education should contribute to the economic development and stability of the country. Bonded scholarship programs are suitable for this purpose as they train professionals in areas that LEDCs need most, for example, medicine, engineering, and teaching, and also to avoid brain drain. However, the African Union also stresses on the voluntary participation in the workforce development and thus the bonded scholarships should be made competitive rather than forcing people to accept them. This way, through the implementation of the best practices recommended by CESA, these programs can adequately meet national and personal interests.

The Arab League's Education and Training Initiatives³⁶

The Arab League's Education and Training Initiatives aim at enhancing literacy, technical and vocational skills, and higher education in member countries especially in the unexploited areas. Some of the Arab League countries have shortage of workforce in areas like health, science and technology which makes bonded scholarships a possible way of producing necessary specialists to fill the gaps. However, if we look at the economic freedom and job market flexibility that the Arab League promotes, then the bonded scholarships should not be such that people feel like they are being pushed into certain jobs. To be consistent with the Arab League policies, these programs should include aspects of fair compensation, other career options, and globalization in order to enhance their effectiveness.

Possible Solutions

Strengthening Bonded Scholarship Programs

For bonded scholarship programmes to be most effective in Less Economically Developed Countries (LEDCs), reforms should address financial sustainability, equitable work commitments, and the relationship between education and national development. However, many of the current programs

³⁵ "Continental Strategy for Education in Africa." Economic, Social and Cultural Council (ECOSOCC), ecosocc.au.int/sites/default/files/files/2021-09/continental-strategy-education-africa-english.pdf.

³⁶ "Who Are We?" Arab League Educational, Cultural and Scientific Organization (ALECSO), www.alecso.org/nsite/en/component/content/article/814-who-are-we-v2?catid=63&Itemid=220.

are plagued by problems such as underfunding, lack of transparency, and rigid work obligations that act as a deterrent to participation. To strengthen these programs, a multi-faceted approach is needed, including clear contractual terms to protect student rights, competitive salaries for bonded graduates, and career progression. Furthermore, individuals receiving the scholarship should receive mentorship, professional training, and some level of work commitment schedule flexibility to ensure that these programs are not only beneficial to the individual but also to the economy as a whole.

International Partnerships for Skill Development

International collaboration is essential to enhancing the quality and impact of bonded scholarship programs. Partnerships with global institutions, such as the United Nations, World Bank, and universities in More Economically Developed Countries (MEDCs), can provide LEDCs with technical expertise, funding, and curriculum improvements. Such collaborations can also include exchange programs, remote learning initiatives, and international accreditation to ensure that students receive globally competitive education while remaining committed to their home countries' workforce needs. Furthermore, skill development programs supported by international organizations can help bridge the gap between academic training and real-world job market demands, ensuring that bonded scholars are well-prepared to contribute effectively upon graduation.

Incentives for Private Sector Engagement

Private sector involvement can provide additional funding, training opportunities, and employment pathways for bonded scholarship recipients. Governments can encourage businesses to invest in these programs through tax incentives, public-private partnerships, and co-financing models where companies help fund scholarships in exchange for access to a skilled workforce. By integrating private sector expertise into education programs, students can receive hands-on experience, internships, and guaranteed job placements in industries critical to national development, such as technology, healthcare, and engineering. This approach not only reduces financial pressure on governments but also ensures that scholarship programs remain aligned with evolving industry needs, increasing employment rates and economic growth.

Government-led Education Reforms with Retention Focus

The way Bonded Scholarship Programmes can succeed in their goal of retaining skilled workers, governments must implement broader education and labor market reforms. Many LEDCs struggle with brain drain, where educated individuals seek better opportunities abroad due to poor working

conditions, low wages, and limited career advancement. To address this, governments must improve domestic job prospects by increasing salaries in critical sectors, investing in infrastructure, and ensuring that bonded graduates have access to career development opportunities. Additionally, reforms should include pathways for voluntary service commitment rather than rigid enforcement, ensuring that graduates remain motivated to contribute to national development rather than feeling trapped in their obligations.

Bibliography

"Brain Drain in Developing Countries." *The World Bank*, 2007, https://documents.worldbank.org/curated/en/943531468147538428/pdf/775400JRN020070Developing g0Countries.pdf.

"Effects of Brain Drain in Developing Countries." *DevelopmentAid*, 2024, https://www.developmentaid.org/news-stream/post/100000/brain-drain-indevelopingcountries.

"World Bank Scholarships Program." *The World Bank*, https://www.worldbank.org/en/programs/scholarships.

"Top 25 Fully Funded Scholarships for Developing Countries 2024-2025." *Study Green*, 2024, https://studygreen.info/top-25-fully-funded-scholarships-for-developing-countries/.

"Brain Drain Undermines Progress in Least Developed Countries, UNCTAD Warns." *UNCTAD*, 2007, https://unctad.org/press-material/brain-drain-undermines-progress-least-developed-countries-unctad-warns.

"Top 25 Foreign Government Scholarships for International Students." *Scholars4Dev*, 2023, https://www.scholars4dev.com/1892/government-scholarships-for-developing-countries/.

"Module 9—Brain Drain." *World Bank Group*, 2024, https://www.worldbank.org/en/publication/wdr2023/brief/module-9-brain-drain.

"The Brain Drain from Developing Countries." *IZA World of Labor*, 2014, https://wol.iza.org/articles/brain-drain-from-developing-countries/long.

"Report Suggests Mechanism for Countering Effects of Brain Drain from World's Poorest Countries." *UNCTAD*, 2012, https://unctad.org/press-material/report-suggests-mechanism-countering-effects-brain-drain-worlds-poorest-countries.

"Fully Funded Scholarships for Developing Countries 2025-2026." *ScholarshipTab*, 2025, https://www.scholarshiptab.com/developing-countries/fully-funded.

"Universal Declaration of Human Rights (UDHR)." *United Nations*, 1948, https://www.un.org/en/universal-declaration-human-rights/.

"International Covenant on Economic, Social and Cultural Rights (ICESCR)." *United Nations Human Rights Office*, 1966, https://www.ohchr.org/en/professionalinterest/cescr.

"Education 2030 Framework for Action." *UNESCO*, 2015, https://en.unesco.org/themes/education2030-sdg4.

"Paris Agreement (COP21)." *United Nations Framework Convention on Climate Change (UNFCCC)*, 2015, https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement.

"Sustainable Development Goals (SDGs)." *United Nations*, 2015, https://sdgs.un.org/goals.

"The World Bank Education Initiative." *World Bank*, 2000s, https://www.worldbank.org/en/topic/education.

"Erasmus+ Program." *European Commission*, https://ec.europa.eu/programmes/erasmus-plus/about-en.\

"Continental Education Strategy for Africa (CESA)." *African Union*, 2016, https://au.int/en/documents/20160115/continental-education-strategy-africa-cesa-2016-2025.

"Arab League Education and Training Initiatives." *Arab League*, https://www.arableagueonline.org/en/education-and-training.

"Bonded Scholarship Programs in LEDCs." *Study in LEDCs*, 2023, https://www.studyinledcs.org/bonded-scholarships.

"ProUni – University for All Program." *Ministry of Education of Brazil*, www.acessounico.mec.gov.br/prouni.

"Science Without Borders." Estudo no Exterior, www.estudonoexterior.com/science-without-borders.

"Universal Declaration of Human Rights." *United Nations*, <u>www.un.org/en/about-us/universal-declaration-of-human-rights</u>.

"International Covenant on Economic, Social and Cultural Rights." *United Nations Treaty Collection*, treaties.un.org/doc/treaties/1976/01/19760103%2009-57%20pm/ch iv 03.pdf.

"Education for All." *UNESCO-UNEVOC TVETipedia Glossary*, unevoc.unesco.org/home/TVETipedia+Glossary/show=term/term=Education+for+all.

"Sustainable Development Goal 4 (SDG4)." UNESCO, www.unesco.org/sdg4education2030/en/sdg4.

"Education 2030: Incheon Declaration and Framework for Action for the Implementation of Sustainable Development Goal 4." *UNESCO Institute for Statistics*, <u>uis.unesco.org/sites/default/files/documents/education-2030-incheon-framework-for-action-implementation-of-sdq4-2016-en 2.pdf</u>.

"Goal 8: Decent Work and Economic Growth." *United Nations Sustainable Development Goals*, sdgs.un.org/goals/goal8.

"Goal 10: Reduced Inequality." *United Nations Sustainable Development Goals*, sdgs.un.org/goals/goal10.

"The Paris Agreement." *United Nations Framework Convention on Climate Change (UNFCCC)*, unfccc.int/process-and-meetings/the-paris-agreement.

"The Global Partnership for Education and the World Bank Group: The Facts." *World Bank*, www.worldbank.org/en/topic/education/brief/the-global-partnership-for-education-and-the-world-bank-group-the-facts.

"Erasmus+ Programme." European Commission, erasmus-plus.ec.europa.eu/.

"Continental Strategy for Education in Africa." *Economic, Social and Cultural Council (ECOSOCC)*, ecosocc.au.int/sites/default/files/files/2021-09/continental-strategy-education-africa-english.pdf.

"Who Are We?" *Arab League Educational, Cultural and Scientific Organization (ALECSO)*, www.alecso.org/nsite/en/component/content/article/814-who-are-we-v2?catid=63&Itemid=220.