



**American International University-Bangladesh (AIUB)**

**SDG Activity Report on**

# **SDG 10: Reduced Inequalities**



**Reduce  
inequality  
within and  
among countries**

## SDG Activity Report on

### SDG 10: Reduced Inequalities

#### Contents

<b>University Activities .....</b>	<b>3</b>
IEEE AIUB Student Branch WIE Affinity Group organized a Workshop titled, “Principles, Digital Tools and Genres” for the Female students.....	3
AIUB CELEBRATES INTERNATIONAL WOMEN’S DAY (IWD),2019 .....	5
<b>Faculty Research and Publication .....</b>	<b>7</b>
Corporate Scenario Analysis of Physically Challenged Human Resources in Bangladesh .....	7
Covid-19 vaccine diplomacy: Politics and profit over people .....	7
A Touch Screen Application for Early Childhood Education of Autistic and Learning-Disabled Children .....	10
Wealth stratified inequalities in service utilisation of breast cancer screening across the geographical regions: a pooled decomposition analysis.....	10
Human Capital Inequality and Economic Growth: Evidence with Sub-national data from Thailand .....	11
Educational Inequality: Inter-generational Transmission and its Impact on Economic Growth .....	12
Jonaki - An mLearning Tool to Reduce Illiteracy in Bangladesh.....	13
Bangladeshi ready-made garment development via ubiquitous and mobile computing .....	14

## University Activities

IEEE AIUB Student Branch WIE Affinity Group organized a Workshop titled, “Principles, Digital Tools and Genres” for the Female students

On 3<sup>rd</sup> of October 2019, IEEE AIUB Student Branch WIE Affinity Group in association with IEEE AIUB Student Branch successfully organized a workshop on “Principles, Digital Tools and Genres” in collaboration with Department of Computer Engineering (CoE), Faculty of Engineering (FE) at American International University - Bangladesh. The workshop focused on encouraging women to learn and gather more skills in 2D & 3D modeling and animation designing using the Adobe Flash CC interface. The workshop was carried out by Mr. Nelson Pujante Udaundo, *Lecturer in Animation (2D/3D), Visual Graphics and Visual Effects, AIUB* and Ms. Rani Ellen V. Ramos, *Animation Lecturer, Animation Program – MMC Department, AIUB*. The introductory speech was delivered by Prof. Dr. A.B.M Siddique Hossain, *Dean, FE, AIUB; Advisor, IEEE AIUB Student Branch*, who discussed the importance of animation in the current job market and how it has evolved in recent times with help of advancement in technology. He further discussed how crucial it is to have skills in animation in order to build a successful career in the IT industries. He concluded his speech by encouraging the participants to develop their skills rather than focusing on grades.

After the inauguration speech, the keynote speaker, Mr. Nelson Pujante Udaundo took the stage and discussed the importance of animation in recent times along with his prospective views on animation in near future. He then provided a video presentation portraying the existing animation industry along with providing a few samples of storyboards of a few renowned animation designers. He later introduced the Adobe Flash CC tools software and elaborately explained various types of tools and functions within the software. He initiated the beginning of the ending session by providing hands on session, going through the processes of designing different types of 2D & 3D shapes along with steps for converting them to a smooth 2D & 3D animation. Later, Ms. Rani Ellen V. Ramos took the stage and explained how the animation industry was still a male-dominated field and how women should aim on creating an impact on this field. She concluded her session by thanking IEEE AIUB Student Branch WIE Affinity Group for taking such an initiative and also urged the participants to take the field into consideration.

Afterwards, Dr. Md. Hasan Imam, *Counselor, IEEE AIUB Student Branch; Senior Asst. Professor, FE, AIUB* took the stage and talked about the current demand of animations. He further talked about the necessity of having animation skill, especially if the field was engineering. He concluded the event by thanking IEEE AIUB Student Branch WIE Affinity Group for organizing such an event. Later, he presented crests and certificates to speakers as a token of appreciation. The workshop was graced by the presence of Ms. Tasnuva Tasneem, *Motivator and WIE Coordinator, IEEE AIUB Student Branch; Asst. Professor, FE, AIUB*.





### AIUB CELEBRATES INTERNATIONAL WOMEN'S DAY (IWD),2019

American International University- Bangladesh (AIUB) celebrated International Women's Day (IWD) through an event organized by AIUB Women Forum on the 10<sup>th</sup> of March 2019, in Auditorium at 11:00 am, The program was inaugurated by the university's honorable Vice Chancellor Dr. Carmen Z. Lamagna and enriched with the presence of the university's honorable chairman and member of the board of trustees, Ms. Nadia Anwar. A panel discussion was the focal point of the celebration in participation with the distinguished guests including media personality, singer of Bangladesh Ms. Mehreen Mahmud, renowned fashion designer Ms. Humaira Khan and by Prof. Dr. Taslima Monsoor, Advisor, Department of Law, Faculty of Arts and Social Sciences, AIUB. The panel discussion was moderated by Ms. Farheen Hassan, Director, BBA program, FBA, AIUB.

The audience of the program included the distinguished Deans, associate deans, professors faculty members and prospective students from the different faculties of the university. The program turned out to be insightful as the discussion helped spark reinforcement to the symbiotic balance between both genders and achieved the status of success to this year's theme: #BalanceforBetter.





## Faculty Research and Publication

### Corporate Scenario Analysis of Physically Challenged Human Resources in Bangladesh

Author: Dr. Sahin Akter Sarker et al.

#### Brief Description:

The issue of job opportunities and welfare of marginalized section of society is an important area of Human Resource Management. Physically Challenged Persons (PCPs) is marginalized in developing countries including Bangladesh. One of the prerogatives of Human Resource Management Department (HRMD) or Human Resource Administration Department (HRAD) is to look after the welfare of PCPs. HRM has long been advocated by national administration in Bangladesh. This study aims to investigate the functioning of HRAD in the sphere of PCPs with the help of primary survey data of Bangladeshi companies. An extensive company survey is made in and around the capital city Dhaka where head quarters of the major companies are located. Public and private organizations including the Multinational and NGOs are covered in the survey. The findings of the survey highlight moderate penetration of HRAD in Bangladesh company sector. However, unfavorable attitude of employing physically challenged persons (PCPs) has been observed. Physically challenged persons are not recruited over the last five years (2011 – 2015). ‘Human Resource Administration Department’ (HRAD) failed to address issues of physically challenged person at the time of staff selection. Hence, involvement of HRAD in the sphere of PCPs needs improvement. This study will help the future researchers to come up with further investigation which could help this vulnerable group.

Source: [https://iba-du.edu/upload\\_images/Vol.40\\_No.1\\_Article\\_5.pdf](https://iba-du.edu/upload_images/Vol.40_No.1_Article_5.pdf)

### Covid-19 vaccine diplomacy: Politics and profit over people

Author: Mohammed Foysal Chowdhury et al.

#### Brief Description:

Disparity in the vaccination drive across countries has once again accentuated the global inequality and it is threatening to further widen the gap between the influential and the vulnerable countries. The initial excitement over the development of multiple vaccines has somewhat died down when a few countries started to use the vaccine as a tool to advance their own political and economic agenda. Vaccine diplomacy has already become a crucial factor in the global power play and four countries are at the forefront of the game right now: US, China, Russia, and India. Their strategies are taking new twists and turns all the time while the fate of billions is hanging in the balance.

Many have wondered about the puzzling absence of US in the growing diplomatic vaccine battle among superpowers despite the fact that two of the most effective jabs were produced by US-

based pharmaceutical companies Pfizer-BioNTech and Moderna. Biden administration has carried on with former president Trump's 'America First' motto in this regard and concentrated primarily on inoculating their own citizens first. Political commentators have termed this policy as 'vaccine nationalism' and this self-serving bias has reached to an extreme level. US secured enough shots for vaccinating its entire population by mid 2021, and then it started to stockpile either to use these as booster dose or use this surplus next year! When the middle and low-income countries were grappling to manage vaccine even for the frontline health workers and elderly people, and US embargo on vaccine export worsened their woes. Inward-looking policy of US has paved the way for other countries to play their cards.

The news of approving the first Covid-19 vaccine, Sputnik V, came from Russia in August 2020, and naming the vaccine after world's first artificial satellite signifies Russia's effort to reassert its global influence. Medical experts criticized the lack of reliable data after it was endorsed by the Russian government and the roll out process was quite slow at the beginning as Russians had doubts over the efficacy of the vaccine (it should be noted that recent data show the vaccine is almost 90% effective). Low domestic uptake prompted the Russian government to export vaccines to other countries and there were many interested parties at the receiving end, the countries that failed to get hold of vaccine from other sources. Russia capitalized the geopolitical opportunity to pursue their vested interest. For example, after delivering Sputnik V batch to Bolivia, Russian president Vladimir Putin discussed with his Bolivian counterpart the possibility of building a nuclear plant and exploring lithium mining opportunity. Similar approaches have been observed in dealings with other countries as well.

China's reputation hit a new low due to the barrage of allegations over mishandling the pandemic at its early stage, and the government has been desperate to restore its prestige ever since. It started sending out masks and personal protective equipment (PPE) to different countries in early 2020 and the development of effective vaccine 'Sinovac' by the state-owned firm in late 2020 enriched their armory. Though the efficacy of the vaccine was recorded as low as 50.4% in some trials, it has been serving as a valuable option for the countries hardly struck by the vaccine shortages. China's vaccine delivery drive has often been labelled 'Health Silk Road', referring to the country's multibillion-dollar ambitious project 'Belt and Road Initiative' (BRI). The purpose of BRI is to increase trade worldwide and China has been chasing the same goal of fostering its trade ties with the vaccine distribution initiative. For instance, after receiving Sinovac, Brazil lifted bar on the Chinese company Huawei Technologies Ltd and permitted them to participate in the coming 5G network auction. On the other hand, Brazil's neighbor Paraguay could not avail Sinovac because of their support for Taiwan's sovereignty, a claim outrightly rejected by China. This shows that China's vaccine distribution has not been solely guided by altruistic motifs, political and business interests have also been key driving factors.

Countering China's clout in Asia is one of the incentives behind India's 'Vaccine Maitri' (Vaccine Friendship) initiative, a global effort to dole out vaccine to countries. India is one of the biggest producers of pharmaceutical products of the world and riding on this reputation, one private



Indian company, Serum Institution, obtained the license from Oxford-Astrazeneca to manufacture the Covishield vaccine. While many rich countries have been hoarding vaccines, India's initiative to supply Covishield to poorer countries received admiration from the international community. India focused on improving its relations with its neighbors through vaccine diplomacy and even promised to provide 1.2 billion doses for World Health Organization's (WHO) Covax program. India's veteran politician Shashi Tharoor commended country's smart exercise of soft power and hoped that this might help India to get support from the vaccine recipients in its future endeavor of securing a permanent seat in the United Nation's security council. This along with other aspirations of India experienced an unexpected major shock when a deadly variant of the corona virus started to rage across the country with unprecedented fatality. India immediately stopped exporting vaccines to meet its domestic demand and that jeopardized other countries' (such as Bangladesh) inoculation program that were heavily relying on India's commitment.

The deep-rooted government-corporate nexus has become more glaring during the pandemic. Developing countries have been pressing for patent waiver of Covid-19 vaccine since last year but to no avail. After assuming power US president Biden expressed his interest to throw support behind the move but it received strong criticism from the multinational pharmaceutical companies. Biden commented that sharing vaccine recipe with other countries would boost up the production across the world as more and more countries will be able to manufacture the vaccine locally to meet their own demand and this will help to bring down the global infection rate very quickly. The opponents of the decision, mainly the pharmaceutical companies and their lobbyists, decried the decision claiming that it would undermine the private enterprises' spirit of innovation. They argued that revoking patent protection would not help in scaling up vaccine production overnight because manufacturing requires sophisticated technology that pharmaceutical companies of poor countries would not be able upgrade very fast. The advocates of the patent waiver consider these grounds very lame and reiterated that any further delay on the matter would continue to complicate the ongoing crisis.

Unfortunately, the wealthiest nations cannot feel safe even after immunizing all their citizens and keeping their borders closed because the virus will continue to mutate as long as it keeps spreading and present vaccines will not work against the new variants. The severity of the impending crisis can be mitigated only if the global leaders can take a prompt decision to prioritize people's lives over politics and profit. And the clock is ticking!

Source: <https://businesspostbd.com/post/33007>

## A Touch Screen Application for Early Childhood Education of Autistic and Learning-Disabled Children

Author: Dr. Kamruddin Nur et al.

### Brief Description:

In this paper, we present a touch screen desktop application (Kids Play) designed to help the learning-disabled kids to learn preschool education. Usually, learning-disabled kids are less attentive than normal kids. Attention gaining is one of the major challenges for teaching learning-disabled and autistic kids. We conduct a user study to identify requirements of such an interactive touch screen application which is exciting, engaging, and effective. Then we conduct a user evaluation in three different schools with preschool (3-5 years old) kids, their teachers, and parents. The features, interaction design, the architectural components, and the user evaluation of Kids Play are presented here.

Source: <https://dl.acm.org/doi/10.1145/3377049.3377123>

## Wealth stratified inequalities in service utilisation of breast cancer screening across the geographical regions: a pooled decomposition analysis

Author: Rezwanaul Haque et al.

### Brief Description:

#### Background

Breast cancer is the most commonly occurring cancer among women in low-resourced countries. Reduction of its impacts is achievable with regular screening and early detection. The main aim of the study was to examine the role of wealth stratified inequality in the utilisation breast cancer screening (BCS) services and identified potential factors contribute to the observed inequalities.

#### Methods

A population-based cross-sectional multi-country analysis was used to study the utilisation of BCS services. Regression-based decomposition analyses were applied to examine the magnitude of the impact of inequalities on the utilisation of BCS services and to identify potential factors contributing to these outcomes. Observations from 140,974 women aged greater than or equal to 40 years were used in the analysis from 14 low-resource countries from the latest available national-level Demographic and Health Surveys (2008–09 to 2016).

#### Results

The population-weighted mean utilisation of BCS services was low at 15.41% (95% CI: 15.22, 15.60), varying from 80.82% in European countries to 25.26% in South American countries, 16.95% in North American countries, 15.06% in Asia and 13.84% in African countries. Women

with higher socioeconomic status (SES) had higher utilisation of BCS services (15%) than those with lower SES (9%). A high degree of inequality in accessing and the use of BCS services existed in all study countries across geographical areas. Older women, access to limited mass media communication, being insured, rurality and low wealth score were found to be significantly associated with lower utilisation of BCS services. Together they explained approximately 60% in the total inequality in utilisation of BCS services.

### Conclusions

The level of wealth relates to the inequality in accessing BCS amongst reproductive women in these 14 low-resource countries. The findings may assist policymakers to develop risk-pooling financial mechanisms and design strategies to increase community awareness of BCS services. These strategies may contribute to reducing inequalities associated with achieving higher rates of the utilisation of BCS services.

Source: <https://archpublichealth.biomedcentral.com/articles/10.1186/s13690-020-00410-5>

### Human Capital Inequality and Economic Growth: Evidence with Sub-national data from Thailand

Author: Dr. Md. Nasir Uddin et al.

#### Brief Description:

**Purpose** – This paper aims to find the effects of human capital inequality on economic growth.

**Design/Methodology/Approach** –Thailand Labor Force Survey (LFS) has been used to generate provincial average year of schooling and Gini coefficient of years of schooling for the year 1995-2012. Econometric techniques have been employed to identify the effects of human capital inequality on economic growth.

**Findings** – Economic growth is inversely affected by the distribution of human capital in Thailand. The coefficient of human capital inequality suggests that if Gini coefficient increases by 0.01 points, gross provincial product (GPP) decreases by about 2 percentage points in the long run. However, the effect of average years of schooling in GPP is not significant.

**Research limitations/implications** – There is a lack of strong theoretical background on the relationship between human capital inequality and economic growth to support the empirical study.

**Practical Implications** – The findings of the study help to design and evaluate education policies in developing countries like Thailand and other low and middle income countries.

Originality/Value – This paper is among the first attempts to analyze the effect of human capital inequality on economic growth with sub-national level annual data. In addition, it considers cross sectional dependence in panel model.

Keywords Human Capital Inequality, Economic Growth, Cointegration, Cross Sectional Dependence.

Source: <https://doi.org/10.1108/IJSE-07-2018-0368>

### Educational Inequality: Inter-generational Transmission and its Impact on Economic Growth

Author: Dr. Md. Nasir Uddin et al.

#### Brief Description:

There's a lot of research that's been studied on inequality. And inequality in human capital is another dimension that gets attention. Compared to income inequality, which is rising in many countries, it's not a good place to be. Inequality in human capital tends to decrease. A study of inequality trends in human capital is no less important than studying the trend of inequality in income, Castello and Domenech (2002) found that inequality in human capital affects economic growth more than income inequality. Although the definition of human capital consists of the abilities and skills that are in the person from being educated. But research that studies inequality in human capital uses the number of academic years as variables instead of human capital, since being educated plays an important role in acquiring other elements of human capital.

Thailand's education reforms first came to light in 1999, and the education budget has almost doubled within a decade, but educational achievement has declined. office of accreditation and quality assessment therefore, have surveyed the quality of schools in Thailand to meet the minimum standards? the survey found that more than 20 percent of schools do not meet standards. besides of these, most are located in rural areas.

Intergenerational Transmission of Education may be transmitted naturally (hereditary) from parenting or from both. The inter-generational human capital transfer study is critical to the design of educational policies, behrman and Rosenzweig (2005) gave examples of how policies focused on increasing women's education would not have a positive impact in the long run. If the rate of maternal education transfer is lower than that of the father parenting or investing with children may vary depending on the socioeconomic status of parents. in developing countries like Thailand and especially in rural areas. extended families, where family members from different generations coexist, are common. parents will be caring for all family members, including children and grandchildren, thus making the child-to-income investment ratio less and the rate of education transfer different from the case of developed countries.



Whether inequality hinders economic growth is a long-time debate and study issue. the theory of inequality and economic growth uses wealth inequality to explain it. most studies use income inequality as a representation of wealth inequality. human capital inequality and its impact on economic growth have been a topic of attention lately, as inequality in human capital has decreased while there has been a high rate of economic growth in the case of many countries. income inequality changed less when compared over the same period.

Uddin and Sarntisart's 2019 study on educational inequality, inter-generational transmission and its impact on Thailand's economic growth Using Labor Force Survey to calculate gini coefficient values of the number of academic years of all provinces. Overall, Thailand has seen a steady decline in educational inequality in all sectors, especially since 2000, with the exception of the North and Northeast beginning to decrease significantly after 2007.

Uddin and Sarntisart also studied inter-generational education transfer rates, finding that in Thailand, fathers had higher transfer rates than mothers. Children from high-income families living in urban areas receive higher education. Looking at gender, research has found a trend of Reverse gender inequality, when men had a higher average number of academic years than women. This means that there is an educational disparity between the sexes, but this gap has been decreasing until women now have a higher average number of school years than men.

Despite Thailand's policies to reduce educational inequality such as compulsory education or the Student Loan Fund (NEC), the study will be limited. Implementing education policies of a specific nature Targeted Education Policy, along with, helps to help tackle educational inequality more effectively. For example, Bangladesh has a policy of promoting education that targets women because mothers are found to have higher rates of inter-generational education than their fathers. Thailand may therefore design an education promotion policy that targets men from low-income families in rural areas.

Source: <https://www.posttoday.com/finance-stock/columnist/616510>

### Jonaki - An mLearning Tool to Reduce Illiteracy in Bangladesh

Author: Raihan Uddin Ahmed et al.

#### Brief Description:

Bangladesh is a densely populated country with a high rate of illiteracy. The largest group that contributes to this high rate is from the adult population. Due to the widespread acceptance of mobile phones, developing mobile phone based adult literacy learning tools may help the country with literacy issues. This paper introduces one such mobile application called "Jonaki" a simple yet powerful self-learning mobile application to teach people how to read and write Bengali. With the help of audio and video, the application creates a friendly learning environment for the illiterates. With the help of surveys on mobile phone usage by people with zero level education,

the user interface of the application is made an easy one. If utilized by the government and the mobile operators, Jonaki may drastically reduce illiteracy in Bangladesh within a short span of time.

Source: <https://www.ijcaonline.org/research/volume128/number17/ahmed-2015-ijca-906761.pdf>

Bangladeshi ready-made garment development via ubiquitous and mobile computing

Author: Dr. Md Taimur Ahad et al.

Brief Description:

Little is known about mobile-based information system (hereafter MbUS) affordances in the manufacturing sector, particularly in the Bangladeshi ready-made garment (hereafter RMG) industry - the major contributor to the national economy. However, the sector faces challenges in communication, worker disempowerment, and long lead times to produce finished goods. Research suggests that MbUS has potential development impact to improve communication, coordination, and empowerment. This study narrows the gap through utilizing affordance theory as a theoretical lens to examine MbUS affordance applied to Bangladeshi RMGs. Using 39 interviews, this research explores five MbUS affordances - connectivity, mobility, agility, empowerment and governance, and their relationship to Bangladeshi RMGs. Furthermore, we identify empowerment as a crucial affordance rarely identified in prior RMG literature. Our findings have potential value to RMGs, government, and mobile telecommunications.

Source: <https://doi.org/10.1002/isd2.12170>