



—
INSTITUT DE HAUTES
ÉTUDES INTERNATIONALES
ET DU DÉVELOPPEMENT
GRADUATE INSTITUTE
OF INTERNATIONAL AND
DEVELOPMENT STUDIES

THE GENEVA CHALLENGE 2021

The Advancing Development Goals International Contest for Graduate Students

“The Challenges of Crisis Management”

Last year, 366 teams composed of 1,368 graduate students from 102 countries registered to take part in the Geneva Challenge 2020. Building on this success, the Graduate Institute continues to encourage interdisciplinary problem-solving analysis among graduate students from around the world. Thanks to the vision and support of Ambassador Jenö Staehelin, a long-standing partner and friend of the Graduate Institute, we are now proud to launch

the eighth edition of The Geneva Challenge – Advancing Development Goals Contest, which in 2021 will address “The Challenges of Crisis Management”.

The world today faces an unparalleled range of challenges that permeate borders. Hunger, poverty, conflict, climate shocks, migration, unemployment and, more recently, the COVID-19 pandemic are only a few. One in three people in the world suffers from some form of malnutrition, while 736 million people live in extreme poverty¹. Natural disasters become ever more intense and frequent, affecting more than 1.7 billion people in the last decade². Gender inequalities persist in education, health, economic opportunities and access to political decision-making and leadership, as women and girls remain over-represented among the extreme poor and make up 60 percent of the chronically hungry.³ For children in many countries, school enrolment goals are being met, a major achievement, and yet more than 600 million children have not reached minimum proficiency levels in reading and mathematics. In low and middle income countries, 53 percent of children cannot read proficiently by age 10⁴. The current COVID-19 pandemic has proved to be not only a major health crisis worldwide, but is also wreaking enormous economic and social damage in both developing countries and advanced economies.

The list of ills goes on. The many crises undermine human security, exacerbate inequalities and hold back the local and global socio-economic, political, cultural and environmental goals called for under the Sustainable Development Agenda. The COVID-19 pandemic has made it doubly clear that the achievement of the agenda’s 17 goals is urgently necessary. Policies

¹ The World Bank. “*Year in Review: 2019 in 14 charts*”, <https://www.worldbank.org/en/news/feature/2019/12/20/year-in-review-2019-in-charts>

² UNDP. “*Crisis Response: Speed, effectiveness and predictability*”, www.undp.org/content/undp/en/home/crisis-response.html

³ UN Women. “*Facts & Figures*”, <https://www.unwomen.org/en/news/in-focus/commission-on-the-status-of-women-2012/facts-and-figures>

⁴ UNICEF. “*Addressing the learning crisis: An urgent need to better finance education for the poorest children*”, reliefweb.int/report/world/addressing-learning-crisis-urgent-need-better-finance-education-poorest-children

to recover from the pandemic and its myriad inter-connected crises should seek transformative changes that reduce risks from future crises and reinvigorate the implementation efforts of the SDG's.⁵

Management of today's crises must go beyond one-size-fits-all schemes. Successful crisis management today requires being inter-disciplinary and analysing the ways in which individuals, governments, civil society, international organisations and private sector organisations can and should respond. In this Geneva Challenge, we are seeking innovative and cross-cutting proposals. The competition could not be more timely.

As an aid to participants, highlighted below are more details of some of the specific pressing issues and challenges being experienced worldwide.

Pandemics and Health Crises

- Since its emergence in 2019, the novel coronavirus has spread to every continent and has had a worldwide impact, ravaging particularly the health care systems and economies of low and middle income countries (LMICs) that were already struggling to achieve universal health coverage, meet standards of quality healthcare and increase access to health services. This is reflected in the excess mortality faced in LMICs during the pandemic: while 42% of deaths were due to non-access or non-utilization of healthcare services, 58% was due to poor quality of healthcare services (UNDP, 2020). For instance, a report by the United Nations Economic Commission for Africa highlighted that healthcare systems across the continent are under-resourced, with lower proportions of available hospital beds, intensive care units, and health professionals than other regions of the world. According to a WHO survey, prevention and treatment services for noncommunicable diseases (NCDs) have been severely disrupted since the pandemic began. "More than half (53%) of the countries surveyed have partially or completely disrupted services for hypertension treatment; 49% for treatment for diabetes and diabetes-related complications; 42% for cancer treatment, and 31% for cardiovascular emergencies." According to a recent WHO survey in 130 countries, 93% of the countries reported that the COVID-19 pandemic has disrupted or halted critical mental health services. In particular, 60% of the countries reported disruptions to mental health services of vulnerable people, including children, older adults and women⁶. However, the statistics on mental health conditions were stark even before the pandemic, for instance, the global economy loses more than US\$ 1 trillion per year due to depression and anxiety⁷. According to a UN policy brief, the COVID-19 pandemic has highlighted the need to urgently increase investments in mental health services to deal with the increase in symptoms of depression and anxiety in a number of countries⁸. While all age groups are at risk of contracting COVID-19, older persons in both developed and developing countries are particularly vulnerable to the disease, "with those over 80 years old dying at five times the average rate. An

⁵ WEF, "How learning in a crisis can build more resilient leadership,"

www.weforum.org/agenda/2020/08/how-a-crisis-can-build-more-resilient-leadership/

⁶ WHO. "COVID-19 disrupting mental health services in most countries, WHO survey,"

www.who.int/news/item/05-10-2020-covid-19-disrupting-mental-health-services-in-most-countries-who-survey

⁷ UN SDG, "COVID-19 and the need for action on mental health,"

<https://unsdg.un.org/resources/policy-brief-covid-19-and-need-action-mental-health>

⁸ *Ibid.*

estimated 66% of people aged 70 and over have at least one underlying condition, placing them at increased risk of severe impact from COVID-19.⁹

- The COVID-19 pandemic is not just the defining global health crisis of our time but also a socio-economic crisis that has affected both developed and developing countries. The global shock caused by the pandemic has led to disruptions both in the supply and demand side of an interconnected world economy: “On the supply side, infections reduce labour supply and productivity, while lockdowns, business closures, and social distancing also cause supply disruptions. On the demand side, layoffs and the loss of income (from morbidity, quarantines, and unemployment) and worsened economic prospects reduce household consumption and firms’ investment” (Chudik et al., 2020). The global downturn in economic growth due to the pandemic is expected to reverse years of progress made on development goals and push an additional 88 million to 115 million people back into extreme poverty¹⁰. According to the Global Economic Prospects June 2020, “the deep recessions triggered by the pandemic are expected to leave lasting scars through lower investment, an erosion of human capital through lost work and schooling, and fragmentation of global trade and supply linkages” (World Bank, 2020). Moreover, experts predict the continued acceleration of deglobalization in a post-COVID world. In particular, “for most low- and middle-income economies, the price will be steep in terms of lost trading opportunities”¹¹ as well as loss of tourism, dwindling remittances, subdued capital flows and tight financial conditions. The economic effects of the pandemic are accelerating in a number of low and middle income countries that already have inadequate healthcare infrastructure and systems but also run largely on informal economies, as many people were unable to stop working without losing their sole source of income.¹² In particular, “almost 1.6 billion informal economy workers (representing the most vulnerable in the labour market), out of a worldwide total of two billion and a global workforce of 3.3 billion, have suffered massive damage to their capacity to earn a living”¹³. Additionally, over 436 million enterprises face extreme risks of serious disruption and are operating in the hardest hit economic sectors: “232 million in wholesale and retail, 111 million in manufacturing, 51 million in accommodation and food services, and 42 million in real estate and other business activities”¹⁴.
- The 21st century has been affected by other major epidemics. HIV/AIDS remains a significant public health challenge. HIV has infected about 70 million in just 35 years and killed an estimated 35 million people in the same period. 51% of people diagnosed with HIV worldwide are women¹⁵. The Zika virus triggered a wave of brain damage on unborn children in almost 70 countries. Chikungunya has spread rapidly, infecting over 2 million people since 2005 in over 60 countries throughout Asia, Africa, Europe and the Americas¹⁶. In 2019 alone there were estimated 229 million cases of malaria worldwide, however, according to the WHO, the African region continues to carry a

⁹ UN SDG, “*The impact of COVID-19 on older persons*,” <https://reliefweb.int/report/world/policy-brief-impact-covid-19-older-persons-may-2020>

¹⁰ World Bank, “*Poverty*,” www.worldbank.org/en/topic/poverty/overview

¹¹ WEF, “*How deglobalization is hurting the world’s emerging economies*,”

www.weforum.org/agenda/2020/09/convergence-threatened-by-deglobalization-covid19/

¹² WEF, “*The plight of Peru illustrates the danger of COVID-19 to developing countries*,”

www.weforum.org/agenda/2020/06/the-plight-of-peru-illustrates-the-danger-of-covid-19-to-developing-countries/

¹³ ILO, “*ILO: As job losses escalate, nearly half of global workforce at risk of losing livelihoods*”

https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_743036/lang--en/index.htm

¹⁴ *Ibid.*

¹⁵ UNAIDS, “*When women lead, change happens*,”

www.unaids.org/sites/default/files/media_asset/when-women-lead-change-happens_en.pdf

¹⁶ WHO, “*Chikungunya*,” www.who.int/news-room/fact-sheets/detail/chikungunya

disproportionately high share of the global malaria burden¹⁷. Cholera continues to be an indicator of inequity and lack of social development, infecting 4 million people each year with 21,000 to 143,000 deaths worldwide¹⁸. Developing countries face the burden of diseases related to poverty and geographical context. As pointed out by Dupas (2011: 2), “[i]t affects people at much younger ages than the disease burden in developed countries, and its main channels of morbidity and mortality are infectious and parasitic diseases, which generate important public health externalities”. While there are control programmes in place applied for some epidemic diseases, they remain a threat for many of the world’s populations, either due to their rapidly evolving nature, extreme global connectivity or limited access to effective public health measures, medical interventions and vaccines¹⁹.

- Maternal mortality is still unacceptably high, “[a]bout 830 women die from pregnancy- or childbirth-related complications around the world every day”²⁰. Millions of women do not have access to antenatal care and are not assisted by a midwife, a doctor or a trained nurse during childbirth. According to the UNDP, 6 million children still die before their fifth birthday every year and 16,000 children die each day from preventable diseases such as measles and tuberculosis²¹. More than 40% of child deaths occur in the neonatal period. Poverty and inequity are the underlying contributors to many maternal and child deaths. Preventing maternal and child mortality through universal access to maternal and reproductive health care is crucial to achieve the targets of SDG 3 (3.1 and 3.2) of reducing global maternal mortality ratio to less than 70 per 100 000 live births and neonatal mortality to at least as low as 12 per 1,000 live births by 2030²².
- According to the WHO, “[a]chieving the Sustainable Development Goals will depend on strengthened relationships among governments, communities, humanitarian and development actors, who must come together to produce longer-term plans that are based on thorough needs assessments and prioritized to achieve real change in the lives of the people they serve”. The Shanghai Declaration emphasised that health and well-being are essential to achieve sustainable development.²³ While significant advances have been made in reducing child mortality, improving maternal health or fighting HIV for instance (WHO, 2018), many more efforts are needed to fully eradicate a wide range of diseases and address many different persistent and emerging health issues.²⁴

¹⁷ WHO, “Malaria,” www.who.int/news-room/fact-sheets/detail/malaria

¹⁸ WHO, “Cholera,” <https://www.who.int/health-topics/cholera>

¹⁹ WHO, “Managing Epidemics”, www.who.int/emergencies/diseases/managing-epidemics-interactive.pdf

²⁰ WHO, “Maternal mortality”, <https://www.who.int/news-room/fact-sheets/detail/maternal-mortality>

²¹ UNDP, “Goal 3: Good health and well-being”, <http://www.undp.org/content/undp/en/home/sustainable-development-goals/goal-3-good-health-and-well-being.html>

²² WHO, “Sustainable Development Goals,” <https://www.who.int/health-topics/sustainable-development-goals>

²³ WHO, “Regional Office for Europe, *Facing the future: opportunities and challenges for 21st-century public health in implementing the Sustainable Development Goals and the Health 2020 policy framework*”, www.euro.who.int/_data/assets/pdf_file/0003/374052/180278-public-health-future-eng.pdf

²⁴ Sustainable Development Knowledge Platform of the United Nations, “Goal 3: Ensure healthy lives and promote well-being for all at all ages”, <https://www.un.org/sustainabledevelopment/health/>

Poverty

- While global poverty rates have been cut by more than half since 2000, one in ten people in developing regions are still living with their families on less than the international poverty line of US\$1.90 a day, and there are millions more who make little more than this daily amount²⁵. People living in rural and remote areas are particularly vulnerable to the effects of poverty. In 2018, 80 percent of the people below the international poverty line lived in rural areas. Almost 132 million of the global poor live in areas with high flood risk²⁶. Poverty is more than the lack of income and resources to ensure a sustainable livelihood, its manifestations include hunger and malnutrition, limited access to education, health and other basic services, social discrimination and exclusion as well as the lack of participation in decision-making. Managing poverty is intertwined with tackling growing population, unemployment, trade, malnutrition, healthcare and justice systems. The 2030 Agenda acknowledges that eradicating poverty in all its forms and dimensions is the greatest global challenge, more so in the context of the COVID-19 pandemic, as its effects will almost certainly be felt in most countries through 2030. “Under these conditions, the goal of bringing the global absolute poverty rate to less than 3 percent by 2030, which was already at risk before the crisis, is now beyond reach without swift, significant, and substantial policy action”²⁷.
- According to the global Multidimensional Poverty Index (MPI) which measures the complexities of people living in poverty through health, education and standard of living indicators, 1.3 billion people live in multidimensional poverty²⁸. “803 million multidimensionally poor people live in a household where someone is undernourished, 476 million have an out-of-school child at home, 1.2 billion lack access to clean cooking fuel, 687 million lack electricity and 1.03 billion have substandard housing materials”²⁹. Living in poverty also leads to lower life expectancy as they are burdened by limited health care, higher crime rates, poor schools and housing and poor nutrition and food access. The State of Food Security and Nutrition in the World report states 381 million people in Asia alone are undernourished, followed by 250 million people in Africa and 48 million people in Latin America and the Caribbean³⁰. The report shows evidence that the international poverty threshold of US \$ 1.90/day is inadequate for a healthy diet and as a result, over 3 billion people cannot afford a healthy diet³¹. Moreover, the report warns that, “five years after the world committed to end hunger, food insecurity and all forms of malnutrition, we are still off-track to achieve this objective by 2030”³². Lack of investment in human capital as well as these investments not adequately reaching to benefit the poor has been a major impediment to poverty reduction efforts. According to the World Bank, “investing in people through nutrition, health care, quality education, jobs and skills helps develop human capital, and this is key to ending extreme poverty and creating more inclusive societies”³³. Efforts to reduce poverty fail to reach those who are socially excluded and living in extremely vulnerable conditions. As the new global population is “in many ways more unequal than before”, advances

²⁵ United Nations, “Ending Poverty,” www.un.org/en/sections/issues-depth/poverty/

²⁶ World Bank, Poverty, www.worldbank.org/en/topic/poverty/overview

²⁷ Ibid.

²⁸ UNDP, “The 2020 Global Multidimensional Poverty Index,” hdr.undp.org/en/2020-MPI

²⁹ Ibid.

³⁰ WHO, “As more people go hungry and malnutrition persists, achieving Zero Hunger by 2030 in doubt, UN report warns,” www.who.int/news/item/13-07-2020-as-more-go-hungry-and-malnutrition-persists-achieving-zero-hunger-by-2030-in-doubt-un-report-warns

³¹ Ibid.

³² Ibid.

³³ World Bank, “The Human Capital Project,” <https://www.worldbank.org/en/publication/human-capital/brief/the-human-capital-project-frequently-asked-questions>

to reduce extreme poverty globally should be combined with efforts to tackle social inclusiveness (UNDP, 2019).

(Un)employment crisis

- Nearly half a billion people around the world are unemployed or underemployed, which represents 13% of the global labour force (ILO, 2020). According to the World Employment and Social Outlook: Trends 2020 report, unemployment is projected to increase by 2.5 million in 2020. Moreover, the world's labour market is characterized by substantial inequalities, particularly related to geographical disparities in access to decent work. "Among the 11 subregions of the world, the unemployment rate is highest in North Africa (12 per cent) and Central and Western Asia (9 per cent), while the lowest rates are observed in South-East Asia and the Pacific (3 per cent) and North America (4 per cent)" (ILO, 2020). Moreover, inequalities that existed before the COVID-19 pandemic are defining the impact of the crisis on the labour market. In countries in Sub-Saharan Africa, Southern Europe and South Asia that already had a high unemployment rate, the pandemic has led to millions losing their jobs or experiencing a significant reduction in income and working hours. Unemployment rates are rapidly increasing and nearing Great Depression levels. Governments will have to go beyond just handing out emergency stimulus packages and implement large-scale employment programs to create enough decent jobs that re-integrate the newly unemployed workers into the labour market. Additionally, access to employment is regarded as a tool to improve living standards and eradicate poverty. It is also considered to be instrumental to the enhancement of human development and to improve the set of choices and capabilities available to the individuals (Human Development Report 2015). Much evidence also suggests that the gains associated with employment opportunities go beyond the private ones and societies as a whole benefit from this.
- Globally, youth unemployment remains a critical concern. According to the ILO, we observe "[m]ore than 64 million unemployed youth worldwide and 145 million young workers living in poverty"³⁴. A WEF report recognises that this global challenge "will continue to amplify numerous domestic and global risks, including social exclusion, mass migration and generational clashes over fiscal and labour-market policies"³⁵. Youth unemployment is a pressing issue particularly because unemployment at earlier stages of life decreases the future employability of young people, and can lead to a significant social and economic cost for the individual and society as a whole. The 2019 World Development Report (2019: 4) observes "[h]igh-skill university graduates currently make up almost 30 percent of the unemployed pool of labour in the Middle East and North Africa". Also, O'Higgins (2017: 1) raises the issue of the quality of employment; "[i]n low and middle income countries (LMICs) vulnerable and/or informal types of employment have come to dominate young people's labour market experiences, while in higher income countries (HICs) temporary and other non-standard forms of employment are increasingly becoming the norm". In 2018, the average share of NEET (neither employed, nor in education or training rate among 15-29 year-old youth) in OECD countries was 14.3% and over 25% in Brazil, Colombia, Costa Rica, Italy, South Africa and Turkey (OECD, 2019: 52).
- Employment in the informal sector and informal employment remain important in many developing countries. In fact, "[w]hen there is a lack of decent jobs, workers often turn to informal employment, which is typically characterized by low productivity and more precarious working conditions" (ILO, 2016: 44). For many workers it represents their

³⁴ ILO, *Youth employment*, <https://www.ilo.org/global/topics/youth-employment/lang--en/index.htm>

³⁵ WEF, *Youth Unemployment*, <http://reports.weforum.org/global-risks-2018/youth-unemployment/>

main source of income without leading to improvements in living standards. In today's world, "vulnerable employment accounts for over 46 per cent of total employment globally, which translates into nearly 1.5 billion people" (ILO, 2016: 16). This challenge will become even more important in emerging economies where the number of vulnerable workers is predicted to grow by 25 million over the next three years (ILO, 2016: 4). The vulnerable employment rate is especially high in emerging economies and developing countries. Other forms of employment such as forced labour and child labour are often related to hazardous forms of work and appear to be particularly significant in developing countries.

- Technological developments have generated the emergence of new forms of work and the need for new skills. Specifically, "[t]echnological advances – artificial intelligence, automation and robotics – will create new jobs, but those who lose their jobs in this transition may be the least equipped to seize the new opportunities" (ILO, 2018). A large share of existing jobs are regarded as vulnerable to automation, ranging from 47 percent in the United States to a larger share in developing countries such as 69 percent in India, 77 percent in China, and 85 percent in Ethiopia.³⁶ The OECD skills strategy (2019b: 19) stresses that the profound transformation in the nature of jobs due to digitalisation will lead to upskilling and training requirements. Indeed, "many current jobs are being retooled into new forms, resulting in new and sometimes unexpected skill combinations" (World Bank, 2019: 70). This creates a need for redesigning production systems and retraining the workforce. Failure of effectively adjusting will result in skills underutilization and mismatch, which will lead to higher levels of unemployment and inequalities (Braňka, 2006: 7). Technological development and globalisation are also bringing changes to the nature of production. The fast pace of technological change has led to the fragmentation of production, the offshoring of knowledge flows and to a reorganisation of labour across and within firms.

Climate Shocks and Disasters

- Climate change is undisputedly one of the greatest crises of our time. According to the Intergovernmental Panel on Climate Change (IPCC, 2015), each of the last three decades has been successively warmer than any preceding decade since 1850. The IPCC shows that both land and ocean temperature globally have increased in a linear trend and "show a warming of 0.85 [0.65 to 1.06]°C² over the period 1880 to 2012" (IPCC, 2015: 3). Some of the implications of climate change include declining water supplies, reduced agricultural yields, health impacts in cities due to heat, and flooding and erosion in coastal areas. Combating climate change is a core tenet of Sustainable Development Goal 13. The 2030 Agenda stressed that the adverse impacts of this global challenge "undermine the ability of all countries to achieve sustainable development."³⁷ Climate change impacts, adaptation as well as mitigation actions need to be integrated with efforts to achieve sustainable development for countries to meet their targets under the Paris Agreement and 2030 Agenda.³⁸
- The wide-ranging impacts of climate change will change natural environments and have major social and economic consequences over the rest of this century and beyond. Climate mitigation policies require a strong international cooperation in order

³⁶ The Economist, "Machine learning: Jobs in poor countries may be especially vulnerable to automation", www.economist.com/news/finance-and-economics/21689635-jobs-poor-countries-may-be-especially-vulnerable-automation-machine-earning

³⁷ Sustainable Development Knowledge Platform of the United Nations, "Climate change", <https://sustainabledevelopment.un.org/topics/climatechange>

³⁸ Impacts World 2017, "Four key challenges for counting the true costs of climate change", <https://www.impactsworld2017.org/four-key-challenges-counting-true-costs-climate-change/>

to face the rapid growth of the world economy (IPCC, 2014: 114). Although reducing the emissions of carbon dioxide (CO₂) and other 'greenhouse' gases is essential to fight global warming, the climate will continue to change as a result of the emissions already in the atmosphere (IPCC, 2015). However, this does not mean that it is not possible to have an effective defence and strategy to climate change in terms of adaptation (Zilberman et al., 2012). Measures to increase resilience to the impacts of climate change have been introduced across different sectors and levels of society (OECD, 2015). Adaptive responses should take place from the international political arenas to the local context of autonomous individuals (Paavola and Adger, 2006). Based on the EU strategy to adaptation, "the cost of not adapting to climate change" would be at least at least €250 billion a year by 2050 for the EU (European Commission, 2013).

- Globally, natural disasters such as earthquakes, tsunamis, cyclones and storms on average kill 60,000 people per year³⁹. However, the frequency of recorded natural disasters in the last century has increased notably. Climate change and human settlements encroaching further into nature are factors that cause more natural disasters to occur. Disasters have a disproportionate impact on those in poverty, as high death tolls are concentrated in low to middle-income countries that lack infrastructure to protect and respond to natural disasters. Moreover, losses incurred from natural disasters represent a substantial part of the national GDP in some countries. In 2019, MunichRe recorded 820 natural disasters that caused insured losses, a three times increase compared to thirty years ago⁴⁰. The 2002 World Summit on Sustainable Development pointed out the extent to which progress in development can be wiped out by natural disasters⁴¹. Thus, disaster and risk management mechanisms should go beyond immediate relief and support recovery of affected communities and households and should be integrated with the overall framework of sustainable development, poverty reduction and global security.
- Man-made disasters such as oil spills and nuclear testing fallouts have caused immense ecological damage every year. For instance, in July 2020, the oil tanker MV Wakashio leaked more than 1,000 metric tons of fuel into the Indian Ocean, polluting the coral reefs, causing deaths of various species and leaving a lasting impact on the marine ecosystem. During the Cold War, the United States and former Soviet Union conducted over 200 nuclear tests in Kazakhstan, the Marshall Islands and the US⁴². These tests continue to have proven intergenerational health impacts and environmental damage due to radiation exposure. Thus, effectively preparing for and responding to man-made disasters is crucial as they cause sudden shocks to human and environmental development.

Gender Inequalities

- According to the Human Development Report's Gender Inequality Index (UNDP, 2019) the progress made on gender inequality has been under threat in recent years. The WEF's Global Gender Gap Report (2020) shows that the largest gender disparity persist across the subindexes of political empowerment and economic participation and opportunity. As women continue to be under-represented, only 25% of the political

³⁹ Our World in Data, "Natural Disasters," <https://ourworldindata.org/natural-disasters>

⁴⁰ WEF, "This chart shows how much more common natural disasters are becoming," <https://www.weforum.org/agenda/2020/09/natural-disasters-global-risks-2019>

⁴¹ ICSU, *Natural and human-induced environmental disasters*, https://www.preventionweb.net/files/8823_865DDFILEHazardsReportFinal2.pdf

⁴² Business Insider, "Nine man-made disasters that had a big impact on our world", <https://www.businessinsider.com/the-biggest-man-made-disasters-2019-5?r=US&IR=T>

empowerment gap has been closed. In addition, as women's participation in the labour market is stalling and financial disparities persist, only 58% of the economic participation and opportunity gap has been closed (WEF, 2020). Progress towards gender parity is proceeding at different speeds across the various geographical regions of the world. While some gender gaps narrow with economic development, they persist along many dimensions and several gaps do not close with economic development. Gender inequality is closely linked to human development as well as persistent discriminatory social norms prescribing social roles and power relations between men and women in society. The report adds that, "the space for gains based on current strategies may be eroding, and unless the active barriers posed by biased beliefs and practices that sustain persistent gender inequalities are addressed, progress towards equality will be far harder in the foreseeable future" (UNDP, 2019).

- According to the UNDP's Human Development Index (2018), "[g]iven current rates of progress it could take over 200 years to close the economic gender gap across the planet". According to the WEF, only 55% of adult women are in the labour market, compared to 78% of men, while over 40% of the wage gap and over 50% of the income gap are yet to be closed. Moreover, in the labour market gender gaps widen with seniority levels: only 36% of senior private sector managers and public sector officials are women; only 18.2% of firms around the world are led by women; only 22.3% of board members in OECD countries are women, with a lower representation in emerging economies (WEF, 2020). Moreover, in many countries, financial disparities persist, as women remain disadvantaged in accessing credit, land or financial products. Globally, women spend three times longer on unpaid care work than men⁴³. Women are over-represented in informal and vulnerable employment: "the share of women in informal employment in developing countries is 4.6 percentage points higher than that of men, when including agricultural workers, and 7.8 percentage points higher when excluding them."⁴⁴ According to the ILO (2019: 15), a more decent and better future of work for women can only be achieved "by redressing discrimination and disadvantage and overcoming entrenched stereotypes relating to women in society, the value of their work and their position in the labour market".
- Gender inequalities are prevalent in health and education systems and linked to poverty, ethnicity and socio cultural practices that hinder women's access to health and education. According to UNESCO's data, two-thirds of the 750 million adults without basic education are women. While nearly 130 million girls were already out of school before COVID-19, UNESCO estimates that an additional 11 million girls will not be able to return to school due to the education disruption caused by the pandemic.⁴⁵ Women also face a unique burden of diseases when it comes to reproductive health due to fertility regulation, infertility, maternal mortality and STDs. Moreover, "women in developing countries are frequently confronted with a myriad of socio-cultural factors which negatively impinge upon physical well-being and accessibility to appropriate health care services" (Ojanuga and Gilbert, 1992). Additionally, the cumulative effect of underinvestment in women's human capital leads to excess mortality.⁴⁶ Therefore, public health and education policies must address gender inequalities and ensure that the specific needs of women and girls are taken into account.

⁴³ OECD, "Measuring women's economic empowerment," <https://www.oecd.org/dev/development-gender/MEASURING-WOMENS-ECONOMIC-EMPOWERMENT-Gender-Policy-Paper-No-16.pdf>

⁴⁴ UN Women, "Facts and Figures: Economic Empowerment," <https://www.unwomen.org/en/what-we-do/economic-empowerment/facts-and-figures>

⁴⁵ UNESCO, "Keeping girls in the pictures," <https://en.unesco.org/covid19/educationresponse/girlseducation>

⁴⁶ World Bank, "To build human capital, prioritize women's empowerment," <https://blogs.worldbank.org/african/to-build-human-capital-prioritize-womens-empowerment>

Gender-Based Violence (GBV) is a crisis within a crisis as emergency situations related to health, conflicts and the economy lead to an exponential increase in violence against women⁴⁷. According to UNDP, in the past year, 243 million women and girls around the world aged between 15-49 have been subjected to sexual violence perpetrated by an intimate partner⁴⁸. Moreover, one in three women worldwide experience physical or sexual abuse in her lifetime⁴⁹. Men and boys are also targeted. One in five internally displaced or refugee women living in humanitarian crisis and armed conflicts have experienced sexual violence⁵⁰. However, only less than 1% of the funding of global humanitarian funding is spent on GBV prevention and response activities despite their criticality⁵¹. GBV is not just an issue in low and middle income countries, certain groups of marginalized women in high income countries are also extremely vulnerable to GBV. In particular, cases of gender based violence have increased in both developing and advanced economies during the COVID-19 pandemic⁵².

Conflicts

- According to the Uppsala Conflict Data Program (UCDP), the total number of armed conflicts in the world in 2017 was 49 and close to 69,000 people were killed due to state-based armed conflicts⁵³. Currently, over two billion people are affected by fragility, conflict or violence and by 2030, half of these people will live in extreme poverty. In 2019, 79.5 million people were forcibly displaced due to war, conflict and human rights violations, making it the highest number on record according to available data⁵⁴. This was both an increase from the 2018 data of 70.8 million and nearly double the 2010 data of 41 million. In 2019, conflicts in the Democratic Republic of the Congo, Burkina Faso, the Syrian Arab Republic, the Bolivarian Republic of Venezuela and Yemen drove millions of people to seek refuge and safety within their country or flee abroad to seek protection. According to UNHCR's global trends report, "as wars and conflicts dragged on, fewer refugees and internally displaced people were able to return home, countries accepted a limited number of refugees for resettlement and host countries struggled to integrate displaced populations". Armed conflicts have direct effects on individuals by increasing malnutrition, illness, wounds, torture, harassment of specific groups within the population, disappearances, extra-judicial executions and forced displacement. However, they also have severe consequences for the local systems in terms of, "the destruction of crops and places of cultural

⁴⁷ UNDP, "Gender-Based Violence and COVID-19,"

www.undp.org/content/undp/en/home/librarypage/womens-empowerment/gender-based-violence-and-covid-19.html

⁴⁸ *Ibid.*

⁴⁹ World Health Organization, "Violence against women," <https://www.who.int/news-room/fact-sheets/detail/violence-against-women>

⁵⁰ UN Women, "Women's rights in review 25 years after Beijing," <https://www.unwomen.org/en/digital-library/publications/2020/03/womens-rights-in-review>

⁵¹ *Ibid.*

⁵² Frontiers, "Gender-Based Violence during COVID-19 Pandemic: A mini-review," www.frontiersin.org/articles/10.3389/fgwh.2020.00004/full#B11

⁵³ PRIO, "Trends in Armed Conflict, 1946-2017," reliefweb.int/sites/reliefweb.int/files/resources/Dupuy%20Rustad-%20Trends%20in%20Armed%20Conflict%201946%E2%80%932017%20Conflict%20Trends%205-2018.pdf

⁵⁴ UNHCR, "Global Trends: Forced Displacement in 2019," www.unhcr.org/globaltrends2019/

importance, the breakdown of economic infrastructure and of health-care facilities such as hospitals, etc⁵⁵, all of which lead to long term systemic impacts.

- In recent years many internal armed conflicts are being internationalised. External states contributed troops to at least one of the sides in 40 percent of the 48 intrastate conflicts that took place in 2017, with the United States setting the record for a country most involved in internationalised intrastate conflicts. “The increasing internationalization of conflicts over the past few years is worrisome as such conflicts on average are more violent, more difficult to solve, and last longer”.⁵⁶ However, conflict forms today are also strongly localised i.e., the agents, targets, solutions and violence is unique to the local contexts⁵⁷. Part of the reason is that governments in the most violent places lack the political will and resources to take control of their territories and are also more likely to use violence against their own citizens. Furthermore, the rise of authoritarianism and impunity has resulted in worldwide protest movements but also increased violence against civilians. In addition, the interlinkages between climate, conflict, hunger, poverty and persecution create increasingly complex crises and call for integration of short-term humanitarian assistance with long term development assistance.
- The global rise of conflicts has led to an increase in the scale of humanitarian aid. According to the ICRC, successful aid strategies will have different goals as it is primarily intended to prevent disastrous consequences and requires prompt action to assist the affected population groups directly or to prevent the deterioration of local systems. However, humanitarian assistance oftentimes is not enough to meet people’s core needs and even less so in helping them achieve economic self-sufficiency. A survey conducted by the OECD and Ground Truth Solutions revealed that people in crisis contexts mentioned their lack of economic and livelihood opportunities as a primary grievance and demanded financial autonomy rather than prolonged assistance⁵⁸. Moreover, “humanitarian assistance is not designed to put an end to need, but to sustain people through times of need. In addition, humanitarian aid is often unpredictable in nature. Longer-term approaches should be mobilised in order to enable an environment in which people affected by crises are able to earn a living”⁵⁹. The ICRC encapsulates its combined approach of providing short term life-saving assistance as well as long term structural humanitarian assistance in protracted conflict situations. “Ensuring sustainable systems in protracted conflict not only maintains people’s health and livelihoods but also enables the population to avoid protection risks” (ICRC, 2016).

⁵⁵ ICRC, “*The impact of humanitarian aid on conflict development*,” www.icrc.org/en/doc/resources/documents/article/other/57jpcj.htm#:~:text=Humanitarian%20aid%20can%20help%20increase,their%20hands%20on%20relief%20supplies

⁵⁶ *Ibid.*

⁵⁷ ACLED, “*Ten conflicts to worry about in 2020*,” <https://reliefweb.int/sites/reliefweb.int/files/resources/Ten%20conflicts%20to%20worry%20about%20in%202020.pdf>

⁵⁸ OECD Observer, “*Beyond humanitarian aid: Connecting the dots with development*,” oecdobserver.org/news/fullstory.php/aid/6232/Beyond_humanitarian_aid:_Connecting_the_dots_with_development.html

⁵⁹ *Ibid.*

Migration

- Global migration is one of the most significant phenomena shaping our society. According to the UN Department of Economic and Social Affairs, in 2019, there were 272 million international migrants making up 3.5 percent of the global population⁶⁰. The largest international migration flows are South-South⁶¹ and South-North⁶², while 60 percent of the global migrants are in 30 industrialized countries, 40 percent are in 170 low and middle income countries⁶³. However, global migration patterns have become increasingly complex. There is a greater heterogeneity with respect to the determinants, composition and dynamics of migratory flows. This suggests that the magnitude as well as the changing patterns of international migration may have long-lasting consequences on both sending and host countries (IOM, 2020).
- Around 74% of the international migrants in 2019 were of working age (20 to 64 years of age) (IOM, 2020). In 2017, 68 percent of the migrant workers resided in high-income countries. While OECD countries account for less than a fifth of the world's population, they host two-thirds of high-skilled migrants. The increase in high-skilled migrants has led to brain-drain in several LMICs but is the result of several factors, "including increasing efforts by policy makers to attract human capital as they recognize its importance in economic growth, pull factors generated by skill agglomeration, lower transportation and communication costs, and the rising number of international students. At the core of this process is trade in knowledge services provided by high-skilled people. Skill clusters allow better technology exchanges, deeper labor market specialization, and stronger complementary inputs"⁶⁴. Another crucial implication of international migration are remittances, studies have shown that they alleviate poverty in lower and middle income countries, improve several development outcomes, are associated with higher spending on education and reduce child labour in disadvantaged households. Remittances form a crucial source of income and external financing for developing countries, in 2019, remittance flow to LMICs were larger than foreign direct investment⁶⁵. However, the World Bank projects a decline in global remittances by 20 percent in 2020 due to the fall in wages and employment of migrants caused by COVID-19, weak economic growth, weak oil prices and currency depreciation of remittance source countries against the US dollar⁶⁶.

⁶⁰ UN DESA, "Population Facts,"

www.un.org/en/development/desa/population/migration/publications/populationfacts/docs/MigrationStock2019_PopFacts_2019-04.pdf

⁶¹ South-South refers to the flow of migrants from one developing country to the other. Large South-South migration corridors include Bangladesh to India and India to the United Arab Emirates.

⁶² South-North refers to the flow of migrants from a low-middle income country to high income country. The largest South-North migration corridor is Mexico-United States.

⁶³ PRB, "Global Challenge of Managing Migration," <https://www.prb.org/global-migration/>

⁶⁴ World Bank. Global Talent Flows: Causes and consequences of high-skilled migration, <https://blogs.worldbank.org/developmenttalk/global-talent-flows-causes-and-consequences-high-skilled-migration>

⁶⁵ World Bank. World Bank predicts sharpest decline of remittances in recent history, <https://www.worldbank.org/en/news/press-release/2020/04/22/world-bank-predicts-sharpest-decline-of-remittances-in-recent-history>

⁶⁶ *Ibid.*

- According to UNHCR, in 2019 there were 79.5 million people forcibly displaced worldwide due to conflicts and disasters⁶⁷. Among other things, this forced migration exacerbates existing gender inequalities: “families are separated, and there is an increase in female-headed households and socio-economic vulnerability, which heightens the risk of negative coping mechanisms (i.e. early marriage) and exploitation/abuse.”⁶⁸ More than 67% of all refugees worldwide come from just five countries: Syria, Afghanistan, Somalia, Myanmar and South Sudan⁶⁹. In recent years, the migrant crisis in Europe was sparked by millions of refugees and migrants crossing into Europe. According to IOM’s estimates, more than 1,011,700 migrants arrived by sea in 2015 and almost 34,900 by land. And almost 4000 migrants died trying to cross the Mediterranean in 2015. Moreover, countries struggled to cope with the influx and this created division in the EU on how best to deal with resettling people.
- The inclusion of migrants and refugees is a crucial and complex aspect of the migration phenomenon. According to UNHCR, “the process of integration is complex and gradual, comprising distinct but interrelated legal, economic, social and cultural dimensions, all of which are important for refugees’ ability to integrate successfully as fully included members of the host society.”⁷⁰ The integration in the labor market is regarded as a fundamental step to contribute economically. In many countries, upon arrival in the host country often “immigrants experience difficulties in the labor market of the host society as they have limited access to information and social networks, and have restricted knowledge of the new society’s language and culture, inadequate professional skills, lack of host-country educational credentials, and little or no host-country labor market experience” (Lee et al., 2020). A recent study by Lee et al. (2020) finds evidence for both an initial employment gap at the time migrants arrive in the host country and differences among countries with respect to the speed of assimilation and employment convergence to natives.

Learning Crisis

- While access to education has improved in many developing countries, being in school does not equate to learning. Today, 750 million adults in the world remain illiterate, with two-thirds being women⁷¹. In 2019, 262 million children and adolescents worldwide are still out of school⁷². According to the World Bank, ‘learning poverty’ refers to the inability to read and understand a simple text by the age of 10. An estimated 53 per cent of children in low- and middle-income countries cannot read proficiently by age 10 (UNICEF, 2020). UNESCO (2017: 12) stresses, “[w]hile the situation is most acute in the developing world, growing inequalities are also present in many wealthier countries, compounded mainly by increasing globalization and international migration”. Central and Southern Asia and sub-Saharan Africa bear the

⁶⁷ UNHCR, Figures at a glance, www.unhcr.org/figures-at-a-glance.html

⁶⁸ SDC, Gender, Migration and Development, www.shareweb.ch/site/Migration/Documents/Gender%20and%20Migration_final.pdf

⁶⁹ Concern, The 10 refugee crisis to follow in 2020, www.concernusa.org/story/largest-refugee-crises/

⁷⁰ UNHCR, Integration of Refugees, www.unhcr.org/cy/wp-content/uploads/sites/41/2018/02/integration_discussion_paper_July_2014_EN.pdf

⁷¹ UN, 4. Quality Education, https://www.un.org/sustainabledevelopment/wp-content/uploads/2019/07/E_Infographic_04.pdf

⁷² UN, Sustainable Development Goal 4, <https://sustainabledevelopment.un.org/sdg4>

brunt of the learning crisis, which does not only impact the national economy but also prevents individuals from getting out of poverty by gaining the required skill sets for better income-earning opportunities⁷³.

- In particular, the learning crisis creates a major setback in the abilities of countries and job-seekers to capture the benefits of technological change. Thus, making the investment in people's capabilities is essential. Acquisition and renewal of skills and knowledge is of prior importance and "is a matter of lifelong learning". The World Bank (2019: 72) underlines that "[t]his kind of learning is especially germane to skills readjustment amid demographic change—be it the aging populations of East Asia and Eastern Europe or the large youth populations of Sub-Saharan Africa and South Asia". The role of education in skill development is particularly relevant today, and a crucial part of countries' commitments to the sustainable development goal for education, which includes a range of education targets such as equal access to vocational training and university as well as to free and quality universal education at the primary and secondary levels.
- More recently, globally half of the students kept out of classrooms due to the COVID-19 pandemic (nearly 800 million students) do not have access to household computers and 43% (close to 700 million students) have no internet access at home. Additionally, 56 million students live in locations that are not served by mobile networks⁷⁴. "Technology has significant potential to deliver positive change for both learners and teachers alike. Although there is a lot of private sector energy and capital moving into the market, a gap remains around the creation and implementation of EdTech policy by governments⁷⁵". Moreover, investment in EdTech has not particularly led to a considerable increase in learning outcomes in many countries⁷⁶. While digital technology has been instrumental in these crisis situations to offer continued access to education, there is still a long way to go. In particular, strengthening the skills of educators and teachers to effectively integrate technology in education, as well as building the necessary digital infrastructure in these regions will be key given that a majority of the education systems around the world rely on limited technological advancement.

Urbanization

- According to the UN, "55% of the world's population lives in urban areas, a proportion that is expected to increase to 68% by 2050"⁷⁷. According to Euromonitor, in 2018, there were 33 megacities, each with populations of 10 million or more⁷⁸. By 2025, the

⁷³ UNESCO, The learning crisis is causing a skills crisis, Here's why,

<http://uis.unesco.org/en/blog/learning-crisis-causing-skills-crisis-heres-why>

⁷⁴ G-STIC, "How COVID-19 exposed challenges for technology in education",

www.gstic.org/inspiration/how-covid-19-has-exposed-the-challenges-for-technology-in-education/

⁷⁵ Tony Blair Institute for Global Change, "Technology and Innovation in Global Education Systems,"

<https://institute.global/policy/technology-and-innovation-global-education-systems>

⁷⁶ World Bank, "Digital Technologies in Education", <https://www.worldbank.org/en/topic/edutech>

⁷⁷ UN, 2018 Revision of World Urbanization Prospects,

www.un.org/development/desa/publications/2018-revision-of-world-urbanization-prospects.html

⁷⁸ WEF, Here is what you need to know about the megacities of the future,

www.weforum.org/agenda/2018/10/these-are-the-megacities-of-the-future/

developing world alone will be home to 29 megacities. While the rise of megacities has led to a wealth of investment, education and employment opportunities, it has also contended with issues such as overcrowding, traffic congestion, air pollution and income inequality. According to Bryan et al. (2019), urbanization “generates both economic opportunity and challenges, like contagious disease and congestion, because proximity increases both positive and negative externalities.” They state the economic benefits of urban connection, wherein agglomeration benefits are at least as high in low and middle income countries as they are in high income countries. However, the fast-paced asset and population growth of cities leads to negative externalities, one that is marked by the lack of adequate housing and infrastructure management. Moreover, for most cities the COVID-19 health crisis has in fact led to a crisis of urban access, urban equity, public services, infrastructure and transportation⁷⁹.

- Providing employment for the rapidly growing population in metropolitan and rural areas, as well as reducing unemployment and underemployment will be a significant challenge. In this context, “[i]ntegrated policies to improve the lives of both urban and rural dwellers are needed, while strengthening the linkages between urban and rural areas, building on their existing economic, social and environmental ties”⁸⁰. The UN also recommends that “[t]o ensure that the benefits of urbanization are fully shared and inclusive, policies to manage urban growth need to ensure access to infrastructure and social services for all, focusing on the needs of the urban poor and other vulnerable groups for housing, education, health care, decent work and a safe environment”.

Overall, crisis management concerns a multitude of groups and has a strategic impact on closing inequalities in human development, productivity, economic growth and long-run development of countries and regions around the world. Therefore, a call for innovative and crosscutting proposals accounting for the context and the multitude of potential actors involved is critical.

There is a pivotal need for an interdisciplinary approach in confronting this global issue. Solutions to this pressing challenge should come from a broad scope of participation in various areas including (but not limited to) – anthropology, business administration, development studies, economics, engineering, geography, history, international affairs, international development, international relations, law, management, political science, public policy, psychology and behavioural science, social policy, sociology, medical and health studies.

Hence, with much uncertainty, spewed by crises around the world, we welcome graduate students from around the globe to embrace these crises as opportunities and devise innovative solutions and proposals to effectively manage them and advance the development goals.

⁷⁹ UN, *Covid in the Urban World*, https://www.un.org/sites/un2.un.org/files/sg_policy_brief_covid_urban_world_july_2020.pdf

⁸⁰ *Ibid.*

References

- Acemoglu, D. and Restrepo, P. 2018. Artificial Intelligence, Automation and Work, NBER Working Paper No. 24196.
- Braňka, J. 2016. "Understanding the potential impact of skills recognition systems on labour markets: Research report". International Labour Office, Skills and Employability Branch. - Geneva: ILO.
- Bryan, G., Glaeser, E. and Tsivanidis, N., 2020. Cities in the developing world.
- Chudik, A., Mohaddes, K., Pesaran, M.H., Raissi, M. and Rebucci, A., 2020. Economic consequences of Covid-19: A counterfactual multi-country analysis. *Center for Economic and Policy Research: Washington DC Retrieved from <https://voxeu.org/article/economic-consequences-covid-19-multi-country-analysis>*.
- Dodani, S., & LaPorte, R. E. 2005. Brain drain from developing countries: how can brain drain be converted into wisdom gain?. *Journal of the Royal Society of Medicine*, 98(11), 487-491.
- Dupas, P. and Miguel, E. 2016. *Impacts and Determinants of Health Levels in Low-Income Countries*. NBER Working Paper No. 22235
- European Commission. 2013. "An EU Strategy on Adaptation to Climate Change." European Commission. Brussels, Belgium.
- Hsu, A., Rosengarten, C., Weinfurter, A., Xie, Y., Musolino, E. and Murdock, H.E., 2017. Renewable Energy and Energy Efficiency in Developing Countries: Contributions to Reducing Global Emissions-Third Report.
- Human Development Report. 2015. "Work for Human Development", NY: UNDP Publication.
- IPCC. 2014. "Climate Change 2014 - Mitigation of Climate Change. Working Group III Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change". Cambridge University Press: New York, United States of America.
- IPCC. 2015. "Climate Change 2014 Synthesis Report". Intergovernmental Panel on Climate Change, World Meteorological Organization (WMO). Geneva, Switzerland.
- International Labour Organization, World Employment Social Outlook-Trends 2016, 2016, Geneva: International Labour Office.
- International Labour Organization. 2019. *A quantum leap for gender equality: For a better future of work for all*. Geneva: International Labour Office.
- International Labour Organization. 2018. *World Employment and Social Outlook: Trends 2018*. Geneva: International Labour Office.
- International Labour Organization. 2020. *World Employment and Social Outlook: Trends 2020*. Geneva: International Labour Office.
- ICRC, 2016. *Protracted conflict and humanitarian action: some recent ICRC experiences*, International Committee of the Red Cross, Geneva.
- International Rescue Committee, 2019. Sustainable Development Goals, in Crisis. New York: IRC.

- Lee, T.H., Peri, G. and Viarengo, M., 2020. The Gender Aspect of Immigrants' Assimilation in Europe (No. 13922). Institute of Labor Economics (IZA).
- McAuliffe, M., Khadria, B., & Céline Bauloz, M. N. (2020). World migration report 2020. *International Organisation for Migration*.
- Mayda, A.M., Peri, G. and Steingress, W., 2018. The political impact of immigration: Evidence from the United States (No. w24510). National Bureau of Economic Research.
- OECD. 2015. *National Climate Change Adaptation: Emerging Practices in Monitoring and Evaluation*. OECD Publishing, Paris.
- OECD. 2019. Education at a Glance 2019: OECD Indicators, OECD Publishing, Paris.
- OECD. 2019b. *OECD Skills Strategy 2019. Skills To Shape A Better Future*. OECD Publishing, Paris, <https://doi.org/10.1787/9789264313835-en>.
- O'Higgins, N. 2017. Rising to the youth employment challenge: New evidence on key policy issues. Geneva: International Labour Office.
- Ojanuga, D.N. and Gilbert, C., 1992. Women's access to health care in developing countries. *Social science & medicine*, 35(4), pp.613-617.
- Paavola, J. and Adger, W. N. 2006. "Fair adaptation to climate change." *Ecological Economics*, Volume 56, Issue 4, 594-609.
- United Nations. 2016. Leaving no one behind: the imperative of inclusive development. Report on the World Social Situation 2016. New York: the United Nations.
- UNESCO. 2017. *A Guide For Ensuring Inclusion And Equity In Education*. Paris: UNESCO.
- UNDP. 2018. *Human Development Indices and Indicators. 2018 Statistical Update*. New York: United Nations Development Programme.
- UNDP. 2019. Human Development Report 2019 Beyond income, beyond averages, beyond today: Inequalities in human development in the 21st century. New York: United Nations Development Programme.
- UNDP. 2020. COVID 19 and health system vulnerabilities in the poorest developing countries. www.undp.org/content/undp/en/home/librarypage/transitions-series/covid-19-and-health-system-vulnerabilities-in-the-poorest-develo.html
- United Nations Sustainable Development Group (UNDG). 2019. Leaving No One Behind: A UN SDG Operational Guide for UN Country Teams. Interim Draft
- UNESCO. 2020. *Global education monitoring report, 2020: Inclusion and education: all means all*. Paris: UNESCO.
- Wodon Q. T. & de la Brière B. 2018. *Unrealized Potential: The High Cost of Gender Inequality in Earnings. The Cost of Gender Inequality*. Washington, DC: World Bank.
- World Health Organization. 2018. *World health statistics 2018: monitoring health for the SDGs*. Geneva: WHO.

World Bank. 2019. World Development Report 2019 - The Changing Nature Of Work. Washington, DC: International Bank for Reconstruction and Development / The World Bank.

World Bank. 2020. The Global Economic Outlook During the COVID-19 Pandemic: A Changed World. Washington, DC.

World Economic Forum. 2020. Global Gender Gap Report 2020. Geneva:WEF.
www3.weforum.org/docs/WEF_GGGR_2020.pdf

Zilberman, D., Zhao, J. and Heiman, A., 2012. Adoption versus adaptation, with emphasis on climate change. *Annu. Rev. Resour. Econ.*, 4(1), pp.27-53.