



Journal of Community Positive Practices

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JOURNAL OF COMMUNITY POSITIVE PRACTICES

COMMUNITY DEVELOPMENT REVIEW

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CAPACITY BUILDING INITIATIVES OF INDIAN GOVERNMENT TO COMBAT COVID 19

Krishna KANABAR¹
Nityesh BHATT²

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Abstract: *With more than four million deaths and 200 million confirmed cases globally (WHO, 2021b), Covid-19 catastrophe and its second wave infringed nations beyond anticipation. The solace came with Covid-19 Vaccines, although, societal perceptions associated with vaccine proved a colossal test. With secondary data, this research attempts to identify how India, responded to such a ferocious infectious disease and how it initiated Covid-19 vaccine immunization drive by operationalizing existing capacities. The research delineates capacity building challenges and effectiveness of measures adopted by the Indian government. As the gigantic immunization drive is ongoing in India, it anatomizes learnings for practitioners and academic research.*

Keywords: *Capacity building; Covid-19; Immunization; India; Vaccines*

Introduction

The world experienced radical changes ever since Covid-19 catastrophe. Because of the infectious virus spread; social and economic milieu of nations experienced intense volatility (v), uncertainty (u), complexities (c) leading to ambiguity (a), posing the VUCA test to the countries. According to the World Bank estimation, Covid-19 recession observed one of the worst downgrades in growth projection from all the recessions since 1990 (Blake & Wadhwa, 2020). In March 2021, the International Monetary Fund (IMF) estimated global growth to be 6%, which was 0.5 % over

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January, 2021 estimation due to intensifying vaccine coverage in nations and financial stimulus in major economies (IMF, 2021).

As per one of the UN reports, additional 108 million workers were pushed into poverty and more than 200 million were likely to be unemployed by 2022 (PTI, 2021b). Various sectors such as tourism, banking and real estate were affected. India's national unemployment rate observed to be twelve month high with 11.9% in May 2021 against 7.97% in April 2021, whereas urban unemployment climbed to 14.73% in May 2021 against 9.78% in April 2021 (Sharma, 2021). Besides, loss experienced due to Covid-19 pandemic did not limit to socio-economic area alone but was brutal on human lives and resulted in more than 4.8 million fatalities (WHO, 2021b).

The countries resorted to numerous measures for containment of Covid-19 across the world. India responded to the first wave of Covid-19 strategically with measures such as nationwide lockdown, formation of scientific national taskforce as well as economic response task force, restrictions on socialization and emphasis on Covid-19 appropriate behavior, issuance of Covid-19 treatment protocol for healthcare professionals, setting up of additional medical infrastructure and initiating one of the largest public health immunization drives. Ram, Babu and Prabhakaran (2020) noted that protective measures such as thermal screening, travel history, securing symptoms, airport screening and novel smartphone application called "Aarogya Setu" for contact tracing were initiated in the country during the first wave. However, the second wave observed peak of more than 0.4 million daily cases of infection that overturned containment in the country.

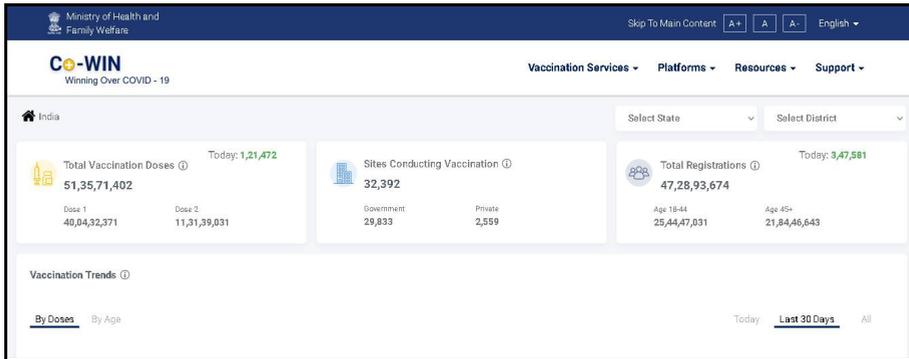
Covid-19 and Indian Response

During coronavirus crisis, vaccine aspirants surfaced from around the world through collaborations. World Health Organization's (WHO) Covid-19 vaccine tracker detailed that number of vaccines in clinical and pre-clinical development were 110 and 184 respectively in early August 2021 (WHO, 2021a). India's medical regulator initially approved two Covid-19 vaccines viz., Covishield (native name for Oxford-AstraZeneca vaccine advanced in the UK and manufactured by Serum Institute of India Ltd.) and Covaxin (by Bharat Biotech International Limited) for emergency use to battle the contagious coronavirus. Later, Russia's Sputnik V in collaboration with Dr. Reddy's Laboratories, Moderna and Johnson and Johnson's single dose vaccines and DRDO's drug 2-DG were also approved.

Indian government adopted detailed governance mechanism model at multi-level, covering its 28 states, 8 Union territories, 736 districts and 7198 blocks (GoI, 2021) to inoculate its massive 1.38 billion population. An integration of varied government departments and development partners, training and capacity building activities, prioritization of beneficiaries, site planning, engagement of private sectors, logistics of vaccines and cold chain management, preparation for adverse events following immunization (AEIF), and monitoring and supervision of vaccination program were some of the critical challenges while developing operational guidelines for a mammoth nationwide vaccination drive (MoHFW, 2020).

The National Expert Group on Vaccine Administration for Covid-19 (NEGVAC) planned entire vaccination process in accordance with the election process and formed a vaccination team of four leading vaccination officers at each center. These vaccination officers were assigned the tasks such as to administer injection, to regulate the entry to vaccination session, to authenticate documents and to support the crowd management, provide information, education and communication messages (IEC) and to support the vaccination team (MoHFW, 2020). However, to keep a track of the beneficiaries proved to be a challenging task. Hence, electoral roll for the Lok Sabha (lower house of Indian parliament) and legislative assembly election were used to identify the “priority population”, i.e. population over 60 years and above. To register and track beneficiaries for immunization, to maintain vaccine stocks and implement effective vaccine delivery, government developed a digital platform called “Covid-19 Vaccine Intelligence Network” (Co-WIN).

Figure 1: Co-WIN Dashboard



Source: <https://dashboard.cowin.gov.in/>

Additionally, beneficiaries could also register through “Aarogya Setu” (more than 200 million downloads) portal in addition to on-site registrations (Annexure 2). To implement one of the largest vaccination drives in the world, Indian government required to ramp up capacity. Howe, Noort, King and Jordens (1997, p. 29) noted that capacity building was the foundation for most of the health promotion programs.

Capacity Building for Containment of Covid-19

Bergeron et al. (2017) referred that WHO demarcated capacity building in health care as advancement of knowledge, skills, commitment, structures, systems and leadership to facilitate effective health promotion. Smith, Tang and Nutbeam (2006, p. 340) decoded capacity building for health promotion in two key areas, viz. organizational level and community level. Organizational level capacity building comprised of training of staff, providing resources, designing policies and procedures to institutionalize health promotion and developing structures for health promotion planning and evaluation.

Community level capacity building included raising awareness about health risks, strategies to foster community interconnections, education to foster health literacy and enabling access to external resources. In nutshell, capacity building had been defined by various researchers in terms of policy framework and procedures, provisioning of resources, governance and leadership, collaborative partnership, infrastructure, communication, and technology (Crisp, Hal and Stephen, 2000, p. 99; Horton & MacLeod, 2008, p. 69).

Being the producer of over 60% of the world's vaccines, India was considered world's pharmacy. With approval of Covishield and Covaxin for emergency use in the country, India initiated the mammoth vaccination program and conducted mock drill in two phases. On successful completion, India opened the vaccination drive for its priority population and achieved 100 million vaccine mark in just 85 days against 89 days in the United States and 102 days in China (Chandorkar, 2021). Following NEGVAC guidelines, more than 8 million healthcare and frontline workers (officials from Police department, armed forces, home guard, disaster management, civil defense organization, prison staff, municipal workers, surveillance staff etc.) were inoculated in the first phase (Sarkar, 2021). In the next phase that started on March 1, 2021, inoculation drive was opened for senior citizens (60 years and above), categorized as "priority population" and for those in age group 45-59 with co-morbidities. This was later extended for all individuals above 45 years and for everyone above 18 years from April 1, 2021, and May 1, 2021 respectively.

However, in March to May 2021, India was quavered by a sudden, unprecedented second wave of Covid-19. The devastating infliction staggered everyone, shattered medical infrastructure, and eventuated into ferocious casualties for want of adequate supplies of medicines, oxygen supply, beds, and healthcare professionals. As the stratospheric turnout at the hospitals continued, India recorded a peak of more than 0.4 million cases during this period. Severe shortage of oxygen supply, critical medicines, hospital beds (including ICU beds), staff, vaccines etc. were reported frequently by media.

The 2020-21 Annual report of the ministry of health and family welfare indicated that India had over 1.5 million dedicated isolation beds in approximately 15,000 dedicated Covid-19 treatment facilities, little over 270,000 oxygen supported beds, approximately 80,000 ICU beds and 40,000 ventilator beds by December, 2020 (MoHFW, 2021a). By the end of the first wave, number of infection cases plummeted and as a consequence, ICU beds were cut down by 46% while oxygen beds dropped by 36% in the country (Rawat et al., 2021). This led to chronic shortage of beds during the brutal second wave. Experiencing backlash for this act and observing spike in number of cases in the country, government attempted to augment capacities for medical supplies and resources, infrastructure, and reform policies.

Organizational level Capacity building

The second wave of Covid-19 in India observed a sudden frenzy in the demand for a critical medicine "Remdesivir" which led to shortfall in the supply. Recognizing this deficit, Indian government accelerated approval of production of this critical medicine

to seven companies, viz. Cipla, Dr Reddy's Lab, Hetero, Jubilant Pharma, Mylan, Syngene and Zydus Cadila in April 2021. Government also showed readiness to approve other companies manufacturing the medicine with necessary raw material and WHO permissions in just 24 hours. As a result, number of "Remdesivir" producing plants surged substantially in April 2021. In second week of May 2021, production of "Remdesivir" amplified to around 10.5 million vials a month compared to 3.7 million vials per month in April 2021 (PTI, 2021a). Government also streamlined import of raw material and waived custom duties on components used for the antiviral drug. It also barred export of vials to address the shortfall. Besides, government requested leading doctors of the country to educate people on correct usage of the antiviral drug. Government intervention also resulted in nearly 50 % reduction in the cost of the medicine. Government also collaborated with state administrations to curb hoarding of the drug and assured private drug producers to procure excess stock of the vials.

Nonstop news of fatalities and shortage of essential healthcare supplies in media during the second wave resulted in unexpected turnouts at vaccination centers. This triggered paucity of vaccines in the country. However, Indian vaccine manufacturers (Serum Institute of India and Bharat Biotech) over-assessed their capacity to supply adequate vaccine doses and waned from the earlier vaccine doses assured. To meet the vaccine demand, Indian government approved Sputnik V vaccine (from the Russian Direct Investment Fund) in association with Dr. Reddy's Laboratories in April 2021. Besides, Drug Controller General of India (DCGI) also approved DRDO's anti-Covid-19 oral drug 2-DG in first week of May, 2021. India also initiated procurement of vaccines from international manufacturers such as Pfizer, Moderna and Johnson & Johnson and offered them all assistance including indemnity (TribuneIndia News Services, 2021). India administered over 920 million doses to its people by early October, 2021. (MoHFW, 2021b). Government also approved three public sector companies i.e., Haffkine Biopharmaceutical Corporation Ltd., Indian Immunological Limited and Bharat Immunological and Biologicals Limited to upscale the production of Covaxin. Additional sites for inoculation, drive-through facilities and on-site registrations were initiated as government extended free vaccines to all the citizens above 18 years of age.

To address dearth of medical oxygen supply, government barred usage of liquid oxygen for non-medical purposes and directed its availability and production for medical use only (Ray, 2021). Additionally, it decided to import 50,000 metric ton of oxygen (Express News Service, 2021). India also received global assistance by way of cryogenic oxygen tanks, oxygen generators, industrial and individual concentrators. Leading corporate houses of India stepped up to offer support and shipped oxygen concentrators from overseas and supplied oxygen from their plants.

Government also waived basic customs duty and health-cess on import of oxygen related equipment for a period of three months and counted funds spent for fighting Covid-19 eligible for mandatory corporate social responsibility. Industries that could use nitrogen plants for producing medical oxygen were also identified. Indian Railways ran special 'Oxygen Express'. The Supreme Court of India also set up a National Task Force (NTF) to guide and assist central government in allocation of medical oxygen to different states (Lahariya, 2021).

Indian government initiated make-shift hospitals, Covid-19 care centers and facilities on war-footing. The Defense Research and Development Organization (DRDO) built Covid-19 hospital facilities in several states. Armed forces also mobilized their retired doctors to attend the escalating number of patients. Acknowledging the scarcity of trained healthcare professionals, government roped in final year medical students, interns and nursing students and offered financial incentives, priority in government jobs and 'COVID National Service Samman' (recognition for Covid national service). Identifying medical professional at municipal, district and state levels and designate them as 'Covid Warrior' were some key actions by the government after a sudden spike (Raj, 2021).

As health is considered a state subject in India; government not only decentralized but also provided autonomy to state administrations for procuring vaccines. Hence, various states issued global tenders to procure vaccines for its people. This decision was later revoked due to multiple challenges. Government also provided an advance schedule of immunization to state administrations for effective planning for each district and vaccine site. Besides, interval between both the vaccine doses was increased to 12 to 16 weeks by the government from earlier four to six weeks. This proved to be a strategic move to cover more number of people.

Several state governments-imposed lockdown and night curfew to restrict movements of people, advised people against large gatherings, and capped number of attendees at wedding and at funeral. Government also launched Indian SARS-CoV-2 Genomics Consortium (INSACOG) to study genome sequencing, mutations, its impact and virus surveillance. This consortium encompassed ten national laboratories (Kunal, Aditi, Gupta and Ish, 2021, p. 784).

End-to-end cold chain storage facilities, uninterrupted transport services and adaptive surveillance system believed to be backbone for effective immunization administration. The vaccine manufacturers in India transported vaccines in a refrigerated truck to the airport from their production facilities. Later, the vaccines were secured in ice-packed thermocol boxes in air cargo and shipped to Government Medical Store Depots (GMSDs) or the primary vaccine storage facilities operated by the Directorate General of Health Services (DGHS). These vaccine shipments were also sent to the GMSDs by road in refrigerated trucks and subsequently to different states. The state vaccine stores then distributed vaccines to regional, district and sub-district level cold chain points via insulated vans, where the vaccines were further being carried by staff members in iceboxes to authorized vaccine sites. India has approximately 29,000 cold chain points to store the vaccines at prescribed temperatures between 2 to 8 degree Celsius (Mukul & Raghavan, 2021).

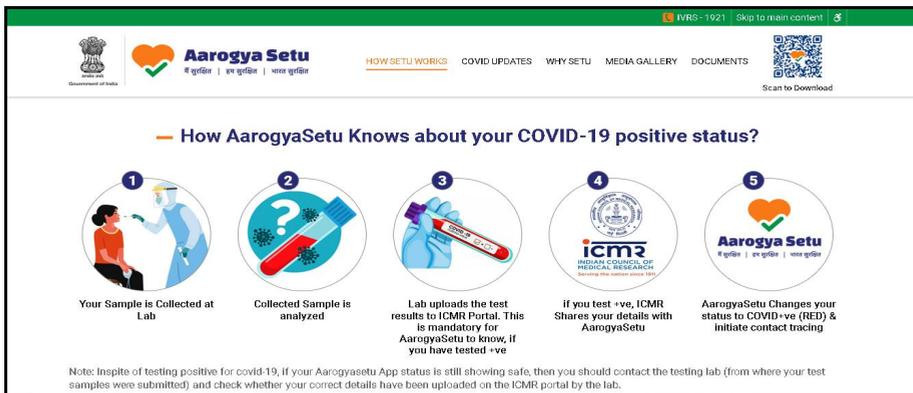
Monitoring and verification of vaccine doses believed to be another crucial pillar of immunization drive. India's vaccine management employed a real-time supply chain management system known as the electronic vaccine intelligence network (eVIN). It tracked vaccine doses offered, its movements, and thus, reduced possibilities of replicas and tampering. It also aided in identifying batch administered to beneficiaries, in case of adverse reaction. To help track each vaccine through supply chain, 'GS1 India'

organization was entrusted by Ministry of Commerce. This IT enabled system worked with leading vaccine producers in the country. (Bhardwaj, 2021).

Covid-19 vaccines were delivered to states free of cost for phase one and phase two of vaccination drive. For phase three initiated on May 1, 2021, central government received 50% of the vaccine produce for distribution to states and Union Territories (UT) based on the criteria of extent of infection. The remaining 50% of vaccines produce was available to state administrations and private hospitals for purchase from vaccine manufacturers directly (Goyal, 2021). Later, this ratio changed to 75 % (free vaccine distribution to states by center) and 25 % (procurement by private hospitals) as government announced free of cost vaccines to all those above 18 years in government facilities. Additionally, Indian government announced free ration to approximately 800 million economically backward and devastated people in the country till November 2021. This move estimated to cost nearly 19.54 Billion USD to the government (Singh, 2021). The country also initiated clinical trials of ‘Covaxin’ on children (12-18 Years) in June 2021.

India’s immunization program witnessed a considerate reliance on the information technology. During the first wave of pandemic, government’s focus was on disseminating information about the spread of virus, identifying infected people within the vicinity, tracing and treating those infected as well as updating information on “Aarogya Setu” web portal.

Figure 2: Aarogya Setu Portal



Source: <https://www.aarogyasetu.gov.in/>

After initiating the nationwide immunization drive, government intensified engaging its tech-savvy population in all the possible ways; right from disseminating Covid-19 specific information over different digital media platforms, updating real-time information of spread of virus to identifying vaccination sites and registrations or downloading certificates of immunization.

The nation launched “Co-WIN” mobile application and web portal for identifying the beneficiaries, registration and verification of their identities, notifying those registered about their subsequent vaccine doses and supporting them in downloading vaccination certificates. To ease the registration process, “Co-WIN” was also made available in national and several regional languages. However, beneficiaries experienced technical glitches not only to register but also to book slots for vaccination. Frequent crash of “Co-WIN” mobile application and website was also experienced. The issue further aggravated as government made online registrations mandatory for beneficiaries above 18 years from May 1, 2021. This decision was revoked later as many people stranded because of technological problems.

Community level Capacity Building

Government of India’s Ministry of Health and Family Welfare developed and issued Covid-19 Vaccine Communication Strategy in early 2021. Its aim was to diffuse in-time and systematic information on vaccine rollout, shed apprehensions and escalate uptake. This strategy specified details on types of vaccines, varied target audiences, initiatives for promotion of vaccines, capacity building strategies, probable ways to brace mass media activities for engaging communities, and monitoring and evaluation of vaccine roll-out. It also offered communication and media plans along with the roles and responsibilities of various departments and ministries (Hopkins, 2021). The strategy also deliberated role of community and religious leaders and other influencers. State administrations were also suggested to develop and execute a decentralized communication strategy, especially for rural and tribal areas.

Various communication interventions by government required to focus on contextual determinants such as socio-cultural environment and influence of social groups in addressing vaccine hesitancy (MacDonald & SAGE Working Group on Vaccine Hesitancy, 2015, p. 4161). Hence, India strategized multilayered, multilingual communication strategy to educate citizens for vaccine uptake and focused on building trust, addressing fears and misconceptions around the vaccines responsible for vaccine cynicism, negativity, and hesitancy. The communication approach at each stage attempted to provide clear, detailed, and targeted information to expedite mass immunization drive. During the first wave, 24*7 National Centre for Disease Control (NCDC) was operational, and a national helpline was made available for inquiries related to COVID-19 and behavioral health. From vaccination approval to implement the mammoth public immunization program in different phases, government methodically disseminated information of vaccination process and its eligibility criteria. Regular press-conferences and media briefings were carried out by government officials to provide first-hand information on vaccination drive, to update developments; with an appeal to abstain from misreporting. The Prime Minister of India also addressed the nation on multiple occasions in fight against the coronavirus and apprised citizens on key policy decisions.

Safety and efficacy of Indian vaccines were repeatedly broadcasted across all media, including online platforms. Government also promoted Covid-19 appropriate behavior and vaccines repeatedly through caller-tunes across all cellular networks in various

languages. These caller-tunes had voice-over of some of the most popular film stars of the country like Mr. Amitabh Bachchan, repeatedly advocating assurance of efficacy and safety of Indian vaccines. The caller-tune also appealed to get vaccinated when eligible and requested to follow Covid-19 protocol. This was in addition to continued, repeated appeals assuring safety and efficacy of vaccines by community leaders and government officials. Zodpey, Negandhi, Dua, Vasudevan and Raja (2020, p. 117) noted that entire government machinery of India and civil society diffused awareness messages during this massive inoculation program.

Analysis and Discussion

Consistent communication from the government officials during lockdown, concrete containment and relief measures and cautious unlocking procedures helped India sail the first wave of infectious disease. However, the second wave caught government off-guard and revealed lapses in proclaimed healthcare infrastructure, inadequate administrative measures, opacity in communication, and evident complacency in Covid-19 appropriate behavior eclipsed progress made during the first wave.

The second wave has prompted lasting social, economic, and psychological distress not just for India but for the world. India's colossal population, constrained healthcare infrastructure including hospital beds, ventilators, oxygen supplies, medicines and medical professionals, unhurried vaccination progress; inhibition to blatant communication posed greater challenges.

Post first wave in the country while the world was laying groundwork for the second wave, India's preparedness and response efforts were not commensurate with its healthcare goals. During the second wave, Bhuyan (2021, p. 1611) observed that Indian government's capacity to re-caliber health infrastructure needed to be flexible and apt (Kumari, 2013, p. 45), considering the "peak and non-peak scenarios". Goel, Sharma and Kashiramka (2021, p. 151) noted that public sector constituted 20 % of total healthcare expenditure in India that represented merely 1% of its GDP. While India grappled to address peak scenario in urban areas; infrastructure in rural settings posed another critical challenge. The immunization campaigns in newspaper, radio, television or on digital media should have insisted on partaking in inoculation drive and consistently reinforce positive health behaviors.

Wang et al. (2013, p. 122) noted that at the time of introducing new vaccines, planning for human and financial resource need to be thought through in detail with logistics. As Indian government collaborated with some of the leading vaccines producers and expanded its vaccine basket (total of five vaccines viz. Covishield, Covaxin, Sputnik V, Moderna and Johnson & Johnson) to address vaccine demand, further actions to facilitate production and funds to private and the public sector should have been provided in time to augment vaccine manufacturing capacities.

Kar, Ransing, Arafat and Menon (2021) noted that administrative barriers such as ineffective co-ordination between states and the central government regarding allocation of medical supplies and vaccines, lack of apparent communication and considerate vaccine wastage acted as obstacle to effective government response.

(McDonald, Goodman, and Hatch, 2020, p. 186) recommended bottom-up structure, keeping local government at the center of response while responding to a crisis.

In addition to administrative barriers, Karlsson et al. (2021) observed that people tend to evaluate safety of the vaccine with respect to how severe they thought disease would be and those assumed the disease to be mild, also believed the vaccine to be unsafe. As complacency was also observed in maintaining Covid-19 protocol after the first wave in India, infection cases peaked; sweeping in the fatal second wave. According to Güner, Hasanoglu and Aktas (2020, p. 571), one of the most effective defenses for a society was through pre-emption of its spread. Fridman, Lucas and Henke (2020) detailed that onus to scale down impact of Covid-19 epidemic lied heavily on behavioral interventions and policies framed for it (Karim, 2021, p. 59). West, Michie, Rubin and Amlôt (2020, p. 451) insisted on adherence to Covid-19 protocols, changing behavior to break the chain of transmission of SARS-Cov-2.

During the epidemic of gigantic magnitude, government was expected to regularly remain observant of citizens' behavior. In contrast, India observed one of the largest spiritual gathering i.e. 'Kumbh' festival (which was later cancelled and organized symbolically after reaching the zenith of the second wave and severe criticism from across the sections). This event organized once in a decade, witnessed millions of believers assembled from whole country for the holy bath in river Ganges, breaching all guidelines. Besides, the Indian cricket board allowed international cricket matches with thousands of supporters, mostly without masks and social distancing. In addition, Election Commission remained silent about the massive political rallies during the assembly elections in five states. Other such social and spiritual congregations further aggravated the upsurge of exponential cases and deaths, during the lethal second wave. Much later, due to Supreme Court's intervention, such rallies were stopped, and victory parades were also prohibited.

Teslya et al. (2020) emphasized that public health institutions should mobilize citizens to adhere to self-regulated measures. It was observed that for any nation, young adults proved indispensable for mitigation of the SARS-Cov-2. Higher participation from them in immunization programs is required and they need to be engaged in the advocacy and mobilization of vaccination initiatives (Leos-Toro et al., 2021). Quality of information diffused through all the sources proved critical during any health crisis. Engaging and interactive means involving the local media with facts and realities should have been employed in India consistently to propagate positive health behavior. Public health campaigns should have emphasized compassionate attitudes in social distancing. Also, community-specific concerns or rumors for different strata needed to be identified, addressed and counselled at all levels with the help of evidence based communication (Puri, Coomes, Haghbayan and Gunaratne, 2020, p. 2586).

Notably, during the pandemic, people of India exhibited trust deficit in the public health system in many parts of the country (Chetterje, 2020, p. 544). Leaders needed to democratize management and communication of vaccine policy and dissemination protocols with scientists and healthcare professionals (Rozek et al., 2021). This authentic sharing of information with research community and people could strengthen trust in the government (Rai, Zodpey, Gosh and Kadri, 2020, p. 170). Moreover, public

health experts, government officials, policy advisors and experts in epidemiology should be forthcoming and engage in dialogue with citizens frequently. Indian government's scientific advisory must include renowned scientists and experts from AIIMS, ICMR, NEGVAC, National Technical Advisory Group on Immunization (NTAGI) etc. to bring more credibility. Besides, India should develop and sustain open data sharing policies for global alliance. Participation of India in global alliance must be step up with epidemiological capacities and national action plan for health emergencies. (Garg et al., 2020). Inter-country associations with high quality research and accurate documentation may help speed up discoveries and our capacity to fight the virus (Rammohan & Rela, 2020).

For the impending third wave, a detailed planning of the resources would be a game changer. The epidemic would ruin individual and societal aspirations and way of living and emasculate a sense of meaning in people and trust in others (Backhaus et al., 2021). Georgieva et al. (2021) suggested that governments should provide financial compensation to citizens who lost their jobs or income due to containment measures and strengthen compliance. Furthermore, Indian government should learn the best practices from around the world to ease psychological, financial and social distress of its citizens and partner with civil societies.

What happened to India during the second wave also occurred in other parts of the globe and can happen elsewhere too, in future. Therefore, the peers in the wealthier nations need to reflect empathy, connectedness and compassionate attitudes. Global health infrastructure should be ramped up and a genuine commitment to ensure equitable access to vaccines to the developing countries should be inevitable (Wong et al., 2021). Societies must be educated continuously and triggered to follow and sustain positive health behaviors. In times of such an unprecedented health crisis, the world leaders need not merely preach but must lead through compassionate actions.

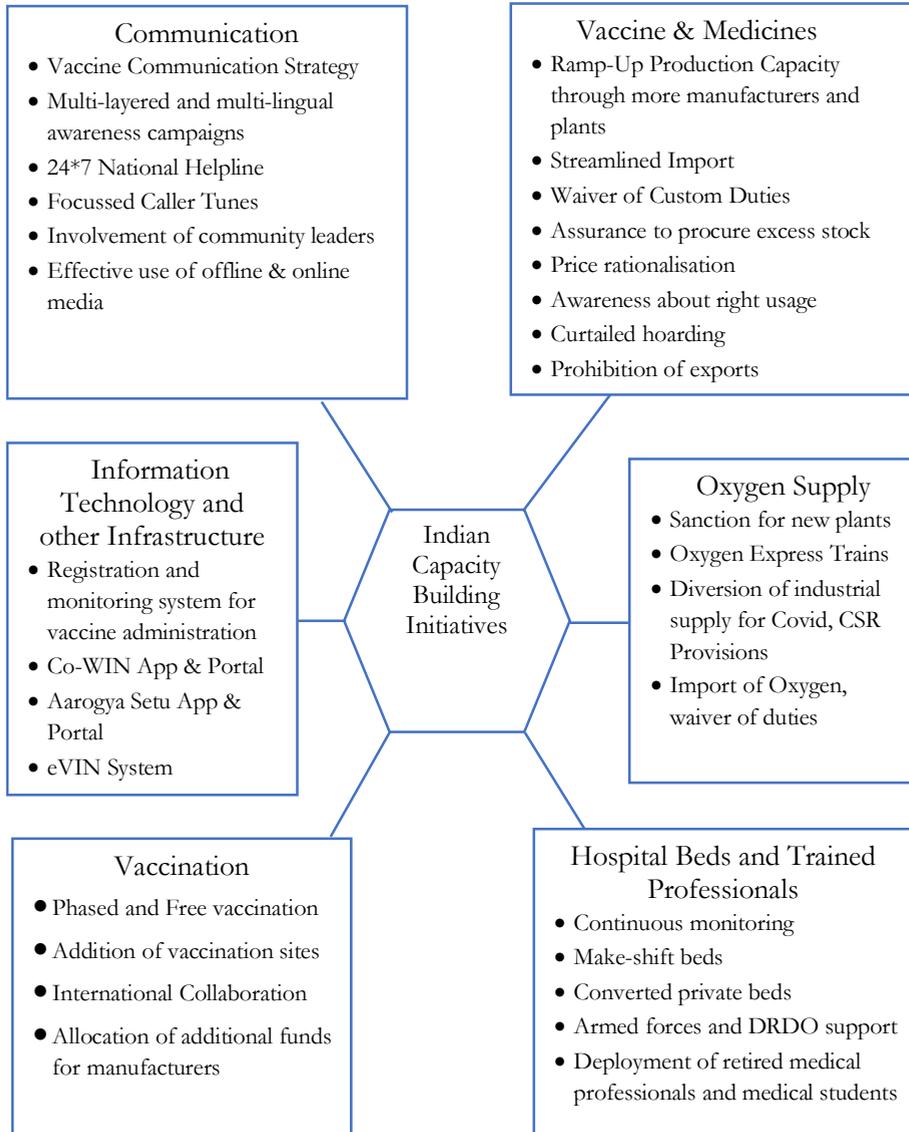
Limitations and Scope for Future Research

While authors made a sincere attempt to showcase and analyze the capacity building initiatives of India Government to combat the second wave of Covid-19, the research was not free from limitations. One of the major limitations was that the paper had been written entirely with secondary information. No government authorities (policy makers, administrators, medical professionals etc.), or citizens were contacted for this research. Also, the scope of this research was confined only to India.

Therefore, the scope for future research can be the following:

Primary research can be conducted to understand the reasons for vaccine hesitancy among various strata of the society i.e. gender, age, region, religion etc. Another useful study can be in form of the comparative analysis of capacity building initiatives of India with other developing countries. Researchers can also perform a detailed analysis of Indian states with the highest per capita vaccination with states observing low vaccination rates. Vaccine wastage is also an important concept requiring an immediate attention. Role of civil society including community leaders, NGOs during the pandemic can also be an interesting area for research. Besides, researchers can also look at the (in) effectiveness of supply chain and technology during an epidemic.

**Figure 3: Indian Government's Capacity Building Initiatives
(Authors' Creation)**



References

- Backhaus, Insa, Felix Sisenop, Edvaldo Begotaraj, John Cachia, Stefano Capolongo, Mauro G. Carta, Marija Jakubauskiene, et al. (2021). "Resilience and Coping With COVID-19: The COPERS Study." *International Journal of Public Health* 66 (April). <https://doi.org/10.3389/ijph.2021.1604007>.
- Bergeron, Kim, Samiya Abdi, Kara DeCorby, Gloria Mensah, Benjamin Rempel, and Heather Manson. (2017). "Theories, Models and Frameworks Used in Capacity Building Interventions Relevant to Public Health: A Systematic Review." *BMC Public Health* 17 (November). <https://doi.org/10.1186/s12889-017-4919-y>.
- Bhardwaj, Tarun. (2021). "Traceability Enables Validation of Vaccines to Prevent Counterfeits: S. Swaminathan, CEO, GS1." *The Financial Express*, June 1, 2021. <https://www.financialexpress.com/lifestyle/health/covid-19-vaccination-circumstances-in-india-ideal-for-counterfeiting-s-swaminathan-ceo-gs1/2262901/>
- Bhuyan, Anoo. (2021). "Experts Criticise India's Complacency over COVID-19." *The Lancet* 397 (10285), 1611–12. [https://doi.org/10.1016/S0140-6736\(21\)00993-4](https://doi.org/10.1016/S0140-6736(21)00993-4).
- Blake, Paul, and Divyanshi Wadhwa. (2020). "2020 Year in Review: The Impact of COVID-19 in 12 Charts." *World Bank Blogs* (blog). December 14, 2020. <https://blogs.worldbank.org/voices/2020-year-review-impact-covid-19-12-charts>.
- Chandorkar, Aashish. (2021). "View: What Do You Do When the World's Pharmacy Needs Prescriptions Itself?" *The Economic Times*, April 14, 2021.
- Chetterje, Patralekha. (2020). "Gaps in India's Preparedness for COVID-19 Control." *The Lancet Infectious Diseases* 20 (5), 544. [https://doi.org/10.1016/S1473-3099\(20\)30300-5](https://doi.org/10.1016/S1473-3099(20)30300-5).
- Crisp, Beth R., Hal Swerissen, and Stephen J. Duckett. (2000). "Four Approaches to Capacity Building in Health: Consequences for Measurement and Accountability." *Health Promotion International* 15 (2), 99–107. <https://doi.org/10.1093/heapro/15.2.99>.
- Express News Service. (2021). "Government Jumps into Action to Ramp up Oxygen, Vaccine Supply amid Second COVID-19 Wave in India." *The New Indian Express*. April 17, 2021. <https://www.newindianexpress.com/nation/2021/apr/17/government-jumps-into-action-to-ramp-up-oxygen-vaccine-supply-amid-second-covid-19-wave-in-india-2290927.html>.
- Fridman, Ilona, Nicole Lucas, Debra Henke, and Christina K. Zigler. (2020). "Association Between Public Knowledge About COVID-19, Trust in Information Sources, and Adherence to Social Distancing: Cross-Sectional Survey." *JMIR Public Health and Surveillance* 6 (3). <https://doi.org/10.2196/22060>.
- Garg, Suneela, Nidhi Bhatnagar, M. Meghachandra Singh, Amod Borle, Sunil K. Raina, Raman Kumar, and Sagar Galwankar. (2020). "Strengthening Public Healthcare Systems in India; Learning Lessons in COVID-19 Pandemic." *Journal of Family Medicine and Primary Care* 9 (12). https://doi.org/10.4103/jfmpc.jfmpc_1187_20.

- Georgieva, Irina, Tella Lantta, Jakub Lickiewicz, Jaroslav Pekara, Sofia Wikman, Marina Loseviča, Bevinahalli Nanjegowda Raveesh, Adriana Mihai, and Peter Lepping. (2021). “Perceived Effectiveness, Restrictiveness, and Compliance with Containment Measures against the Covid-19 Pandemic: An International Comparative Study in 11 Countries.” *International Journal of Environmental Research and Public Health* 18 (7). <https://doi.org/10.3390/ijerph18073806>.
- Goel, Isha, Seema Sharma, and Smita Kashiramka. (2021). “Effects of the COVID-19 Pandemic in India: An Analysis of Policy and Technological Interventions.” *Health Policy and Technology* 10 (1), 151–64. <https://doi.org/10.1016/j.hlpt.2020.12.001>.
- GoI. (2021). “Local Government Directory.” *Lgdirectory*. August 9, 2021. <https://lgdirectory.gov.in/#>.
- Goyal, Divya. (2021). “Explained: Supply Chain of Covid-19 Vaccines and How They Reach Districts.” *The Indian Express*, May 8, 2021. <https://indianexpress.com/article/explained/explained-supply-chain-of-covid-vaccines-and-how-they-reach-the-districts-7306381/>.
- Güner, Rahmet, Imran Hasanoglu, and Firdevs Aktaş. (2020). “COVID-19: Prevention and Control Measures in Community.” *Turkish Journal of Medical Sciences* 50 (SI-1), 571–77. <https://doi.org/10.3906/sag-2004-146>.
- Gupta, Shishir. (2021). “DCGI Gives Emergency Approval of DRDO-Developed Anti-Covid Oral Drug.” *Hindustan Times*, May 8, 2021. <https://www.hindustantimes.com/india-news/dcgi-gives-emergency-approval-of-drdo-developed-anti-covid-oral-drug-101620461286695.html>.
- Have, Penelope, Michelle Noort, Lesley King, and Christopher Jordens. (1997). “Multiplying Health Gains: The Critical Role of Capacity-Building within Health Promotion Programs.” *Health Policy, Special Issue: Health Outcomes and Policy Making*, 39 (1), 29–42. [https://doi.org/10.1016/S0168-8510\(96\)00847-0](https://doi.org/10.1016/S0168-8510(96)00847-0).
- Hopkins, Johns. (2021). “COVID-19 Vaccine Communication Strategy, India - COVID-19 Communication Network.” *Covid19 Communication Network*. January 13, 2021. <https://covid19communicationnetwork.org/covid19resource/covid-19-vaccine-communication-strategy-india/>.
- Horton, Janet E., and Martha L. P. MacLeod. (2008). “The Experience of Capacity Building Among Health Education Workers in the Yukon.” *Canadian Journal of Public Health* 99 (1), 69–72. <https://doi.org/10.1007/BF03403745>.
- IMF. (2021). “World Economic Outlook Reports.” *World Economic Outlook Reports*. IMF. <https://www.imf.org/en/Publications/WEO>.
- Kar, Sujita Kumar, Ramdas Ransing, S.M.Yasir Arafat, and Vikas Menon. (2021). “Second Wave of COVID-19 Pandemic in India: Barriers to Effective Governmental Response.” *EClinicalMedicine* 36 (June). <https://doi.org/10.1016/j.eclinm.2021.100915>.

- Karim, M. R. (2021). The influence of Covid-19 in transforming people's behaviour: Bangladesh context. *Journal of Community Positive Practices*, (3), 59-64.
- Karlsson, Linda C., Anna Soveri, Stephan Lewandowsky, Linnea Karlsson, Hasse Karlsson, Saara Nolvi, Max Karukivi, Mikael Lindfelt, and Jan Antfolk. (2021). "Fearing the Disease or the Vaccine: The Case of COVID-19." *Personality and Individual Differences* 172 (April). <https://doi.org/10.1016/j.paid.2020.110590>.
- Kumari, R. (2013). Inclusive health in India: A disaggregated level analysis. *Journal of Community Positive Practices*, 13(1), 45-60.
- Kunal, Shekhar, Aditi, Kashish Gupta, and Pranav, Ish. (2021). "COVID-19 Variants in India: Potential Role in Second Wave and Impact on Vaccination." *Heart & Lung*, 50(6), 784-87. <https://doi.org/10.1016/j.hrtlng.2021.05.008>.
- Lahariya, Chandrakant. (2021). "How the National Task Force on Oxygen Supply Must Guide Covid Response." *The Indian Express*, May 11, 2021. <https://indian-express.com/article/opinion/columns/national-task-force-covid-19-oxygen-shortage-7309942/>.
- Leos-Toro, Cesar, Denis Ribeaud, Laura Bechtiger, Annekatrin Steinhoff, Amy Nivette, Aja L. Murray, Urs Hepp, Boris B. Quednow, Manuel P. Eisner, and Lilly Shanahan. (2021). "Attitudes Toward COVID-19 Vaccination Among Young Adults in Zurich, Switzerland, September 2020." *International Journal of Public Health* 66, May. <https://doi.org/10.3389/ijph.2021.643486>.
- MacDonald, Noni E. and SAGE Working Group on Vaccine Hesitancy. (2015). "Vaccine Hesitancy: Definition, Scope and Determinants." *Vaccine* 33 (34), 4161-64. <https://doi.org/10.1016/j.vaccine.2015.04.036>.
- McDonald, Bruce D., Christopher B. Goodman, and Megan E. Hatch. (2020). "Tensions in State-Local Intergovernmental Response to Emergencies: The Case of COVID-19." *State and Local Government Review* 52 (3), 186-94. <https://doi.org/10.1177/0160323X20979826>.
- MoHFW. (2020). "COVID-19 Vaccines Operational Guidelines." December 28, 2020. <https://main.mohfw.gov.in/newshighlights-31>.
- MoHFW. (2021a). "2020-21 Annual Report." <https://main.mohfw.gov.in/documents/publication>.
- MoHFW. (2021b). "CoWIN Dashboard." Co-WIN. August 5, 2021. <https://dashboard.cowin.gov.in/>.
- Mukherjee, Priyanka. (2021). "How India Plans to Execute Its Mega Covid-19 Vaccination Drive." *The Times of India*, January 16, 2021. <https://timesofindia.indiatimes.com/india/how-india-plans-to-execute-its-mega-covid-19-vaccination-drive/articleshow/80290406.cms>.
- Mukul, Pranav, and Prabha Raghavan. (2021). "How Splitting Vaccines 50-50 Has Created New Supply Bottlenecks." *The Indian Express*, May 10, 2021.

<https://indianexpress.com/article/india/how-splitting-corona-vaccines-50-50-has-created-new-supply-bottlenecks-7308780/>.

PTI. (2021a). “Remdesivir Production Increased to 1.05 Cr Vials a Month, Says Mandaviya.” *News18*. May 4, 2021. <https://www.news18.com/news/india/remdesivir-production-increased-to-1-05-cr-vials-a-month-says-mandaviya-3706445.html>.

PTI. (2021b). “Additional 108 Mn Workers Pushed into Poverty Due to Covid, 205 Mn Could Be Unemployed in 2022: UN Report.” *The Times of India*, June 2, 2021. <https://timesofindia.indiatimes.com/world/rest-of-world/additional-108-mn-workers-pushed-into-poverty-due-to-covid-205-mn-could-be-unemployed-in-2022-un-report/articleshow/83177030.cms>.

Puri, Neha, Eric A. Coomes, Hourmazd Haghbayan, and Keith Gunaratne. (2020). “Social Media and Vaccine Hesitancy: New Updates for the Era of COVID-19 and Globalized Infectious Diseases.” *Human Vaccines & Immunotherapeutics* 16 (11), 2586–93. <https://doi.org/10.1080/21645515.2020.1780846>.

Rai, Sanjay K., Sanjay Zodpey, Sanghamitra Ghosh, and A. Kadri. (2020). “Joint Statement on CoVID-19 Pandemic in India: Review of Current Strategy and the Way Forward.” *Indian Journal of Community Health* 32 (2 (Supp)), 170–74. <https://doi.org/10.47203/IJCH.2020.v32i02SUPP.001>.

Raj, Minakshi. (2021). “India’s Response to COVID-19.” In *Coronavirus Politics: The Comparative Politics and Policy of COVID-19*, 19. University of Michigan Press. https://www.jstor.org/stable/10.3998/mpub.11927713.12?seq=1#metadata_info_tab_contents.

Ram, Venkata S, Giridhara R Babu, and Dorairaj Prabhakaran. (2020). “COVID-19 Pandemic in India: Is the Curve Now Flat?” *European Heart Journal*, June 15, 2020. <https://doi.org/10.1093/eurheartj/ehaa493>.

Rammohan, Ashwin, and Mohamed Rela. (2020). “COVID-19: Could India Still Escape?” *Journal of Global Health* 10 (1). <https://doi.org/10.7189/jogh.10.010372>.

Rawat, Mukesh, (2021). “Just before 2nd Covid Wave Hit India, ICU Beds Decreased by 46%, Oxygen Ones by 36%.” *India Today*. May 3, 2021. <https://www.indiatoday.in/coronavirus-outbreak/story/just-before-2nd-covid-wave-hit-india-icu-beds-decreased-by-46-oxygen-ones-by-36-1796830-2021-05-03>.

Ray, Meenakshi. (2021). “Centre Restricts Use of Liquid Oxygen for Only Medical Purposes, No Exceptions.” *Hindustan Times*, April 25, 2021. <https://www.hindustantimes.com/india-news/centre-restricts-use-of-liquid-oxygen-for-only-medical-purposes-101619360752627.html>.

Rozek, Laura S., Pauline Jones, Anil Menon, Allen Hicken, Samantha Apsley, and Elizabeth J. King. (2021). “Understanding Vaccine Hesitancy in the Context of COVID-19: The Role of Trust and Confidence in a Seventeen-Country Survey.” *International Journal of Public Health* 66 (May). <https://doi.org/10.3389/ijph.2021.636255>.

- Sarkar, Kanishka. (2021). "Over 8 million Health, Frontline Workers Vaccinated against Covid-19 in India: Govt." *Hindustan Times*, February 14, 2021. <https://www.hindustantimes.com/india-news/over-8-million-health-frontline-workers-vaccinated-against-covid-19-in-india-govt-101613269057737.html>.
- Sharma, Manoj. (2021). "Unemployment Rate Shoots up to 12-Month High of 11.9% in May," June 3, 2021. <https://www.businesstoday.in/current/economy-politics/unemployment-rate-shoots-up-to-12-month-high-of-11-9-in-may/story/440736.html>.
- Sharma, Neetu Chandra. (2021). "Govt Opens Covid-19 Shots for All above 45, Says It Has Enough Stock of Vaccines." *Mint*. March 23, 2021. <https://www.livemint.com/news/india/india-opens-vaccination-for-all-above-45-yrs-of-age-irrespective-of-comorbidity-11616514379667.html>.
- Singh, Astha. (2021). "Centre to Spend Additional Rs 1.45 Lakh Crore for Free COVID Vaccination & Ration Scheme." *Republic World*. June 8, 2021. <https://www.republicworld.com/india-news/general-news/centre-to-spend-additional-rs-1-dot-45-lakh-crore-for-free-covid-vaccination-and-ration-scheme.html>.
- Smith, Ben J., Kwok Cho Tang, and Don Nutbeam. (2006). "WHO Health Promotion Glossary: New Terms." *Health Promotion International* 21 (4), 340–45. <https://doi.org/10.1093/heapro/dal033>.
- Teslya, Alexandra, Thi Mui Pham, Noortje G. Godijk, Mirjam E. Kretzschmar, Martin C. J. Bootsma, and Ganna Rozhnova. (2020). "Impact of Self-Imposed Prevention Measures and Short-Term Government-Imposed
- Social Distancing on Mitigating and Delaying a COVID-19 Epidemic: A Modelling Study." *PLoS Medicine* 17 (7). <https://doi.org/10.1371/journal.pmed.1003166>.
- Tribuneindia News Service. (2021). "Indemnity Likely for Pfizer, Moderna," June 2, 2021. <https://www.tribuneindia.com/news/nation/centre-okays-model-tenancy-act-to-boost-rental-housing-262523>.
- Wang, Susan A., Terri B. Hyde, Sandra Mounier-Jack, Logan Brenzel, Michael Favin, W. Scott Gordon, Jessica C. Shearer, Carsten F. Mantel, Narendra Arora, and David Durrheim. (2013). "New Vaccine Introductions: Assessing the Impact and the Opportunities for Immunization and Health Systems Strengthening." *Vaccine, Decade of Vaccines*, 31 (April), B122–28. <https://doi.org/10.1016/j.vaccine.2012.10.116>.
- West, Robert, Susan Michie, G. James Rubin, and Richard Amlôt. (2020). "Applying Principles of Behaviour Change to Reduce SARS-CoV-2 Transmission." *Nature Human Behaviour* 4 (5), 451–59. <https://doi.org/10.1038/s41562-020-0887-9>.
- WHO. (2021a). "COVID-19 Vaccine Tracker and Landscape." *World Health Organization*. August 6, 2021. <https://www.who.int/publications/m/item/draft-landscape-of-covid-19-candidate-vaccines>.

WHO. (2021b). “WHO Coronavirus (COVID-19) Dashboard.” World Health Organization. August 6, 2021. <https://covid19.who.int>.

PTI, Brian L. H., Manfred S. Green, John Reid, Jose M. Martin-Moreno, Nadav Davidovitch, Laurent Chambaud, Lore Leighton, et al. (2021). “Toward ‘Vaccine Internationalism’: The Need for an Equitable and Coordinated Global Vaccination Approach to Effectively Combat COVID-19.” *International Journal of Public Health* 66 (April). <https://doi.org/10.3389/ijph.2021.1604077>.

Zodpey, Sanjay, Himanshu Negandhi, Aman Dua, Akshaya Vasudevan, and Mitali Raja. (2020). “Our Fight against the Rapidly Evolving COVID-19 Pandemic: A Review of India’s Actions and Proposed Way Forward.” *Indian Journal of Community Medicine* 45 (2), 117-124. https://doi.org/10.4103/ijcm.IJCM_221_20.

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CHALLENGES AND SOCIAL VULNERABILITIES FOR ROMANIAN SEASONAL WORKERS IN GERMANY DURING THE COVID-19 PANDEMIC

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Abstract: *In the present study I highlighted the subjective indicators of the quality of life in the Romanian diaspora during the COVID-19 pandemic, using as a case study the situation of Romanians residing in Germany, as well as of Romanians working in seasonal jobs. The data collected were extracted from primary research based on in-depth interviews that I conducted with Romanian respondents living both in Romania and in Germany between April 2021 and August 2021, also with administrative officials from both countries who agreed to present their opinions on the topic under analysis. The secondary databases have largely completed the data specific to a statistical analysis, but without being able to access a complete picture of Romanian migrants in Germany, as many of the specific macro-data for the period 2020 and 2021 are lacking and others are not finalized. An important part of the secondary data comes from statistical sources provided by Eurostat and the National Institute of Statistics. The increasing presence of Romanians in Germany in recent years has become a topic of interest for both countries, involving joint diplomatic efforts, closer communication and a streamlining of legislation and bureaucracy. In order to strengthen administrative and diplomatic relations between the two countries, the need for research on the proposed topic is a major priority for both Romanian and German academic society.*

Keywords: *Romanian migration to Germany, wage income, undeclared work, discrimination, vulnerable groups, pension system.*

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1. The perception of Romanian workers in Germany, between normality and discrimination

The research tries to answer two important questions in a specific way:

1. What are the main challenges, discriminations and vulnerabilities faced by seasonal workers in Germany?
2. How have the Romanian authorities managed the Covid-19 crisis situation of labor movement to Germany?

Starting from the issue of discrimination of Romanian workers in Germany, we can say that, as a rule, the image of Romanians abroad is largely determined by the collective perceptions formed by the media and the foreign political environment. At the European level, the Covid-19 pandemic outbreak and government measures have deepened social divisions, xenophobia and electoral demagoguery critically directed against immigrant groups from Eastern Europe. The urgent need for labour from the eastern part of the western countries and the parallel criticism of Eastern European immigrants, including Romanians, has generated a double standard and a series of contradictory statements. However, public opinion is sensitive and always attentive to what the local press issues, and the press generally prefers scandalous and biased news, thus directly serving electoral interests. All these aspects "distinguish between the potential effects of interethnic relations, language knowledge and the perception of discrimination as components of integration" (Gherghina, et al., 2020: 515). Accepting the fact that the world of perceptions shapes psychosocial reality, two important levels appear on this topic: a) the external level determined by what is said about Romanian workers in Western countries, especially in Germany; b) the internal level determined by the way the Romanian authorities manage the pandemic during the lock-down period with emphasis on the free movement of citizens in the European space.

Discrimination against Romanians abroad is a complex subject, which involves not only observations of a phenomenon in the making, but also the causes, the reasons why, in some cases, the political environment, helped by some of the media, tries to ideologize a reality in the purest electoral sense. Germany's economic need for foreign labour is doubled by those discriminatory electoral messages, perfectly describing the duplicitous spirit of some politicians and media people who feed an artificial and toxic social environment. „Discriminated migrants might be particularly sensitive to such changes in public debate and may fear future implicit discrimination as a consequence of it” (Prömel, 2021: 29). This may then, in effect, make them feel less a part of Germany and more of their home country. Such a mechanism is also confirmed in the scientific literature in the same opinion which states that discrimination against migrant groups (Gould and Klor, 2015; Elsayed and de Grip, 2017) can have detrimental effects on their integration. In the last ten years, more and more German officials and journalists have complained about Romanian immigrants for selfishly and inefficiently using their welfare system. Here are some of the worrying statements: "They have to leave this

country, just leave!" ("Er muss weg aus diesem Land, einfach weg!"; Ley, 2014); "Romanians and Bulgarians are raiding our countries to abuse the welfare systems, stealing our jobs, probably our cars and wallets", says Ernst Petter Fischer, a German journalist from *DieZeit* (Ernst Petter F. *DieZeit*-online and the same statement of the quoted article is also mentioned in the online newspaper: Euroobserver). They even make politically expressed threats against Romanians, without any scientific basis: "He who cheats, flies". Andreas Scheuer, then general secretary of the CSU: " (Andreas Scheuer, general secretary of the CSU party), and we find the same string of statements in the last years of the Covid-19 pandemic.

In Germany, the expression "welfare tourism", referring to Romanians and Bulgarians appeared among Bavarian conservatives. Bavaria is a battleground for regional and federal elections, and Romanian immigration has become a campaign issue for German conservatives in the CSU (Christliche Soziale Union). A sizeable section of Bavarian politicians is advocating against Romania's entry into the Schengen area. At senior official level, the Bavarian conservative interior minister, Hans-Peter Friedrich, has publicly advocated a travel ban on Romanians, wanting the forced repatriation of those Romanians who have "abused" the German welfare system. "Those who come to work are welcome, but we must not accept that people come here only for the welfare benefits", is the argument mentioned by Hans-Peter Friedrich. Indirectly, he refers in particular to Romanians Roma, who are entitled to about 200 euros per child per month, as they usually have more than 5 children per family (Thomas Öchsner und Javier Cáceres, *Süddeutsche Zeitung*).

In the heated context of these statements, the image of Romanians in Germany has suffered and will continue to suffer. And yet, why has this frequency of unfavorable statements against Romanians continued in recent years, often brought to the surface especially during election periods and not only. What is the reality perspective and how well-founded are they beyond the political and electoral character? There are hardly any Romanian studies on the reality of Romanians in Germany, and these studies do not cover the aspects related to their perception there as immigrants and the quality of life in terms of equal rights and equal treatment. In order to answer these questions in full, we need to know the statistics on the presence of Romanians in Germany, to find out whether their rights are respected and, ultimately, what is the quality of life of those who are in various situations of social risk. The answers to these questions require complex research and cannot be clarified in this study, which is limited to a diagnosis, belonging to a type of exploratory research. The choice to focus on certain indicators and sub-indicators marks the need to capture a social phenomenon concerning the quality of life for Romanians living in Germany.

In general statistics, there were more than 800,000 Romanians in Germany in 2020. However, there are unofficial sources that speak of the presence of more than 1 million Romanians, including Romanian citizens who are not registered and without a work card (Destatis.de 2021). The exact number of Romanians not registered in the German papers is not officially known, but the hypothesis of a very significant number of more

than 200,000 is based on multiple sociological surveys that have shown (from 2014 – 2015), especially in large cities, a significant presence associated with undeclared work, and often with human trafficking in various fields of activity. Romanians entering the labour market in Germany as workers from south-eastern Europe are relatively well integrated, but they are the lowest paid, usually working in positions that are disadvantaged in relation to their level of qualification. In order to get to the edges of this relativity, however, it is necessary to initiate a complex social report, also starting from this exploratory study. Such a comprehensive report can be drawn up individually over several years or in a single year by a team of specialists, provided that there is close cooperation with the relevant German authorities.

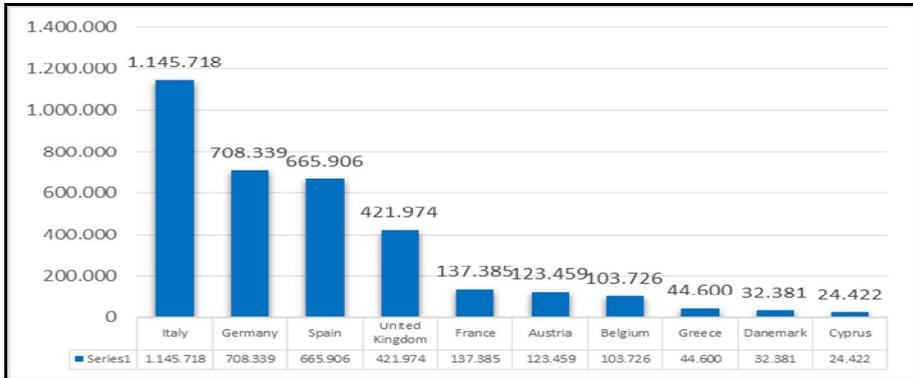
2. Romanian immigration to Germany: data, contexts and statistical comparisons

In 2020, with the outbreak of the Covid-19 pandemic and the travel restrictions imposed by the medical crisis, the number of Romanians in Germany registered with legal documents has seen a slight but not significant decrease. While in the first half of the year, no one suspected how widespread the virus would become, in the second half of the year, things began to change and the media began to realize the length of a prolonged crisis. Romania responded to these challenges on the basis of the domino effect, without taking into account the domestic situation defined by the huge numbers of people working abroad. However, the government acted quickly by issuing emergency decrees in the hope that the situation could be brought under control. The right to work in a different EU state cannot be restricted or conditioned on quotas or differentiation, since any mobile worker is entitled to equal treatment with national workers under EU law (Article 45 TFEU) (Mantu, 2020). On the less expected effects, the process of border closures also known as "lockdown" has forced many seasonal workers from Romania to return to their country of origin, as shown in the following primary data extracted from the Romanian Migration and Immigration Objective Indicator. While in 2019 there were 748,225 Romanian seasonal workers registered on German territory, in 2020 there is a slight decrease, with a figure of 708,339.

The difference between 2019 and 2020 is simply explained by lockdown effects imposed not only by the Romanian state, but also by other European countries. The same can be verified in Spain in 2019 where we find, according to Statista data, 671,985 Romanian immigrants, and in 2020 this number slightly decreases, reaching 665,906.

According to Eurostat data (2020) Romanians and Croatians are among the highest number of people leaving their country of origin to work in other European countries. In 2020, Romanian citizens of working age (20-64) living abroad within the EU accounted for about one fifth (18.6%) of the resident population in Romania, making them the largest national group among mobile citizens in the EU.

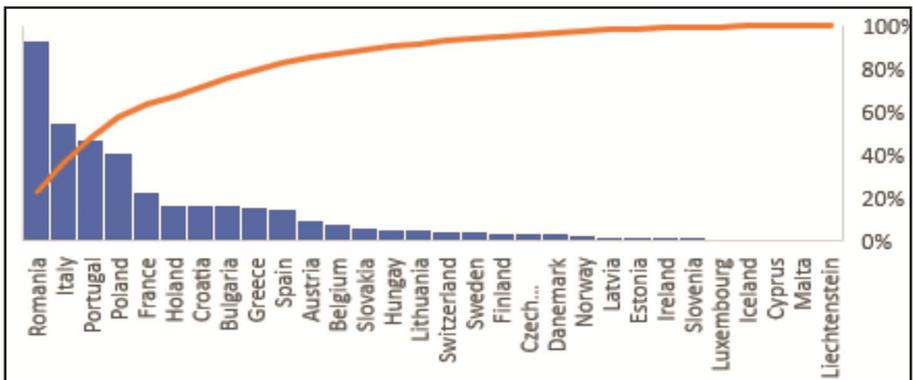
Figure 1: Top 10 EU countries with the highest number of Romanian citizens in 2020



Source: Statista, Number of Romanian citizens present in EU countries 2020 [Dataset]

On the reverse direction of travel, "Romania has become an increasingly attractive destination for many Romanians from the Balkans and neighbouring non-EU countries, which has contributed to the decline of Romanian minority groups in these areas and implicitly to the evolution of Romanian communities through the emigration of these categories of Romanians to EU Member States. Emigration, especially to Western European countries, will remain a strong social phenomenon and Romania will be a source of support for this type of migration, with a particular appeal for human resources with a high level of education" (Fitzek, 2021: 62). In the following figure we observe, on the same objective indicators, but looked at differently, that Romanian citizens are the most numerous and mobile workers on the European market in the period 2010-2020.

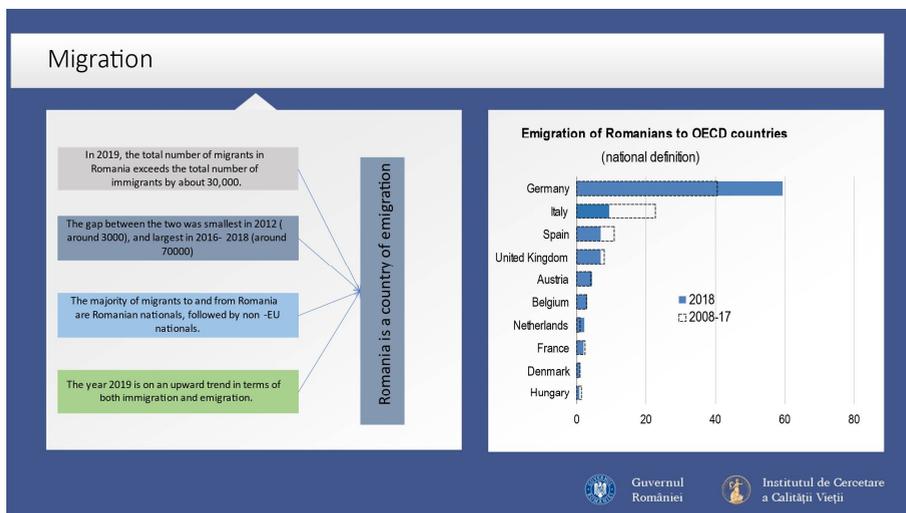
Figure 2: EU citizens of working age having their usual residence in another EU country by nationality and age in 2010-2020



Source: Eurostat (2020) EU/EFTA citizens of working age usually resident in another EU/EFTA country, by citizenship and age (online data code: LFST_LMBPCITA)

Apart from the Romanians who rank first, as can be observed directly from Figure 2, there are three other major national groups, representing between 10.3% and 17.6% of the resident population of their countries of citizenship, namely the Bulgarians (10.3%), the Portuguese (10.6%) and the Croats (17.6%). "The EU Member States with the lowest proportion of mobile citizens (of the resident population of the country of citizenship) were Germany and Sweden (both below 1.0%). In nine other Member States, the share was 3% or less. Overall, mobile EU citizens accounted for 3.3% of the total EU resident population in 2020, which is 0.9 points more than in 2010. On the other hand, if we look at the absolute figures, in 2020, the largest national groups of mobile EU citizens aged 20-64 were from Romania (2 300 100 people), Italy (1 027 800 people), Poland (1 005 500 people) and Portugal (679 600 people)" (Data extracted in August 2021, updated from Eurostat). Compared to the labour force of the country with a population of almost 20 million, Romania has around 5 million employees, unlike the Czech Republic which has 10 million inhabitants and 5 million employees. So, Romania has 5 million people working in the country and about 2,3 million outside, so almost half. In other words, we can say that more than a third of the country's workforce is working outside the country.

Figure 3: Infographic on the phenomenon of Romanian migration between 2010 and 2019



Source: Social Atlas: Romania 14 years after joining the European Union (2021). Infographics report was developed by the Institute for Quality of Life Research with the support of the Romanian Government

Romania is known as a country of emigration, given the large number of Romanians living and working abroad. It is one of the most important emigration countries in the EU. In addition to long-term migrant flows, for which countries such as Italy and Spain have proved to be the preferred destinations, there is also seasonal, highly circulatory migration, such as in agriculture. This kind of migration is difficult to quantify because

of the temporary nature and the various channels used by migrants (recruitment agencies, personal networks). The year 2019 is on an upward trend in terms of both immigration and emigration. In 2019, the total number of emigrants in Romania exceeds the total number of immigrants by about 30,000. The gap between the two figures became smaller in 2012 (by about 3000), registering the biggest difference in 2016-2018 (by about 70000).

However, there are notable reporting differences for the Romanians in Germany, depending on the data sources. For example, while *statista.com* reports 708,339 Romanians (with Romanian papers) in Germany in 2020, the German press reports more than one million Romanians. More than one million people in Germany are Romanian or have Romanian parents (*Deutsche Welle* apud *Romanian Insider*, 2019). Of the 748,000 Romanians living in Germany at the end of 2019, 48,000 were born in the country to Romanian parents. The average age of Romanians living in Germany is 32.2 years, and the largest age group is between 20 and 45 years (over 440,000). More than 151,000 Romanians living in Germany were under the age of 20 (*Romanian Insider*, 2019).

The Federal Statistical Office's databases presented in *destatis.de* (2021) show that the proportion of people of migrant origin in Germany in 2020 was 21.2 million, a remarkable figure representing around 26% of the country's native population. In other words, more than a quarter of Germany's current population is made up of people who were not born on German soil and who had or hold another nationality. The same source says that of this number, more than one million (1.018 million) are Romanian migrants born to Romanian parents.

To clarify the status of migrant in German terminology, people who fall into this category are those who have a migrant background only if both or at least one of their parents was born with another nationality than German. Thus, the term migrant includes any foreign citizen, citizen who acquired German citizenship and German citizen but with foreign parents (Moffitt & Juang, 2019: 656).

Regarding the number of those reported on German territory, in the last eight years, the number of Romanians has increased almost four times since 2012, namely from about 200,000 to more than 750,000, not counting those who have not reported a place of residence. And, to realize the continued growth of the Romanian presence in Germany, it is enough to look at 2019, when more than "50,000 Romanians moved to Germany, representing the largest group of new migrants for the second consecutive year" (*Bevölkerung in Privathaushalten 2019 nach Migrationshintergrund*). Another statistical curiosity extracted from official German sources shows that out of the almost 750,000 Romanians present on German territory, at the end of 2019, approximately 48,000 were new-borns to Romanian parents.

In this equation, surprisingly, Germany is the second country, after Italy, in terms of the number of Romanians, followed by Spain and United Kingdom, which rank third and fourth, respectively. Attraction to the German labour market undoubtedly has many advantages, but also major risks which require a new approach to Romanian-German

economic relations, but above all new legislation to protect immigrants from the European area.

3. Dissemination of the results of the interview of Romanian seasonal workers working in Germany

Closing the borders and reuniting Romanian families for a short period of time due to the Covid-19 pandemic has not prevented waves of departures by airplane from Romania, back to seasonal work in Germany, towards the end of the first half of 2020 (see the scandals related to social distancing in Romanian airports: Cluj, Iasi etc). These departures have first and foremost made vulnerable the children of the migrants, who, in an extremely risky period have been left in the care of relatives or the state (Dragan, 2021). "*The authorities have changed, through the latest Military Ordinance, the authorisation procedures for civilian charter flights, after more than 1,500 Romanians crammed into the parking lot of Cluj International Airport yesterday. These are workers who have gone to Germany for seasonal work. Congestion caused exasperation among local authorities, who dispatched gendarmes to help dispersing them*" (<https://www.rfi.ro/social-120156-inghesuiala-acroport-cluj-noua-ordonanta-militara>). In disregard of the directives of the emergency ordinances issued by the Romanian government, the majority of Romanian workers left under dubious contracts, including in Germany, where a significant proportion of them had no legal agreement. During the 10th and 12th of April 2020, I conducted 12 open interviews with respondents at Otopeni Henri Coandă airport in Bucharest, who were leaving for Germany to work seasonal jobs in Frankfurt, Mainz, Hamburg and Munich. While looking for respondents, 12 out of 15 randomly selected respondents agreed to participate to the interview. There were no ethical issues during this interview and the discussion was informal.

3.1. Application of the interview guide among seasonal workers, analysis and results

Of the 12 respondents, six were women and six men, aged between 25 and 45, located in the airport lounge, subjects who agreed to participate, without any reservation, answering a set of 10 questions. At the time, the 12 people (8 urban and 4 rural) were waiting for planes to Germany to work in seasonal agricultural work. The exception was one person who was leaving to work in construction. Through the interview guide I set out to achieve three objectives:

1. during the first objective, I sought to find out what led Romanian seasonal workers to depart and put themselves at risk of contracting Covid-19, given that the distance between individuals was not respected and air traffic was not able to ensure minimum safety and hygiene standards;
2. a second objective was to find out from respondents whether they leave with a legal work contract;
3. in the third objective I sought to ascertain the subjects' plans, in the medium and long term, with regard to the hypothesis of a permanent assignment in Germany.

In the first objective, the main reason evoked by the interviewees to justify their decision of leaving and working in Germany at any cost is poverty described as severe material deprivation. "Concern for the prevention and reduction of marginalization and social exclusion becomes an important instrument of social solidarity culture. The concept of vulnerable social groups exposed to multiple risks generated by modern societies is thus brought to light" (Zamfir, 2020: 25). For them Romania is a country of unemployment, and the lack of money and work opportunities together form a triad of poverty. In the often evoked responses, "Romania is incapable of providing a minimum living standard", the quality of life being only a desideratum in the survival equation. Out of 12 respondents, 7 said that without the opportunity to work in seasonal agricultural activities in Germany, they would be at risk of severe poverty and social exclusion." Their position reflects the situation of material deprivation, and in some cases even severe poverty that characterizes many areas of rural Romania. The last decades have brought a central theme of social policies: social inclusion as a response to the multiple risks of exclusion. It is a broadening of the policy vision from focusing almost exclusively on economic poverty (lack of income), to new forms of exclusion and marginalization through: social inequality and social injustice, violation of human rights not only in everyday practice but also in the legal and political system (Zamfir, 2020: 25-24). This is why the situation has also become entrenched also with regard to the following aspect: social justice, following the words of this respondent who expresses his desperation to work abroad: 'I don't have enough to feed my daughter at home, and my husband can't find work, nothing in Romania can be done. They threw him out of the company where he had worked as a slave for them for 10 years, without any reason. Just because they complained that they had no money to pay the salaries, but their boss was taking 100 million in hand and my man was barely given 10 million. Only "Dorel" everywhere, some take everything and don't work, others take the dust off the drum. The bastards have strangled this country. This can't be happening. What kind of country do we live in? Where is justice?'

The other respondents also gave the same arguments, pointing out that Romania's main problem is not only the low living standards, wages, laws and opportunities, but above all those related to justice through inequality, scarcity, theft and social inequality. The disproportion between the salaries paid to those who work and to bosses/managers in the budgetary and private sectors are disproportionate and are the most painful issues mentioned by all respondents. In an order of importance, the main reason that led respondents to leave is first of all social injustice and then poverty. In the last 31 years Romania has been deprived of "the most important public debate consumed in the gap between the wealthy and the poor, or more simply put from excessive accumulation of wealth versus severe poverty." (Fitzek. 2020: 108). Today, any intention in this regard has been completely abandoned, and great social frustrations flourish instead.

Regarding the legality of the employment contract, of the 12 respondents, only one subject had a legal employment contract, the other 11 opted only on the basis of mutual agreements made verbally with a Romanian recruitment firm. Avoiding any risk, the 11 respondents relied exclusively on the verbal agreement with their job brokers, on the idea of a fictitious salary, and the only argument evoked for trust was based on the fact that the same company offered them free transport, accommodation and meals,

together with a salary ranging from 1000 to 1500 euros. Three of the eleven respondents also relied on their previous experience of being employed by the same company in previous years. Quote: "There is no such thing as ripping us off because we worked with them before last year and they kept their word". When asked, however, how they could trust a mutual agreement without any paperwork and without any health insurance or what they would do if they got sick, respondents avoided answering directly, justifying that nothing bad could happen to them. In all direct answers they avoided any negative variants that would make them worry about their decision.

Last but not least, the topic of moving permanently to Germany generated three categories of responses: 8 out of 12 respondents said they would move under any conditions at the first opportunity, three respondents said they would make this change if they could bring their families and one respondent preferred to live in Romania and move abroad only for work. I could not help but notice their determination, also characterized by strong emotions, to leave Romania at any cost. The arguments they mentioned are part of the reality of those who live in small towns lacking opportunities and especially those in rural areas.

The relatively worrying conclusions of the interview highlight several issues:

1. there is obviously a phenomenon regarding Romanians who leave for seasonal work without ensuring the legality of the documents, the obligation of a contract that ensures the respect of fundamental labour rights, as in the case of medical insurance;
2. the main reasons for leaving the country permanently, not necessarily only to Germany, are: severe material deprivation, social injustice and lack of hope for a better future.
3. subjects knowingly violate some temporary restriction rules imposed by the authorities;
4. subjects, with one exception, would leave this country at any time to obtain the dignity of a better life or at least a quality of life that would ensure them a decent living;
5. in the respondents' opinion, the Romanian authorities are to blame for the rise of undeclared work, as long as they do not get involved and take no interest in their fate;
6. during the period of the ban on the movement of persons imposed by the Covid-19 medical crisis, the subjects consider that the Romanian authorities are not allowed to prevent free movement. On the contrary, in their opinion, the authorities are to blame for the agglomeration created, the lack of organization and the lack of minimum safety and hygiene conditions.

The findings bring to the surface a number of long-standing problems that characterise the Romanian migration indicator, and the period of the Covid-19 medical crisis only highlighted the structural vulnerabilities present since the Revolution. More and more Romanians are choosing the path of migration because they feel abandoned by the Romanian state, unable to represent their interests. One of the structural problems,

often mentioned by the subjects, is the lack of concordance between what the authorities say through the media, what they impose through legislation in Parliament and what is applied in society. The three levels do not communicate with each other and the reality, as reflected in the media, is on the opposite side of the tracks.

3.2. Application of the interview guide among officials on migration to Germany, analysis and results

For the second research segment, we chose three important institutions that are directly related to ministerial representation, diplomatic relations and the statistical situation of Romanians living abroad: the Department of Romanians Abroad (D.R.A.), the German Embassy in Bucharest and the Ministry of Labour and Social Protection. Of the 25 people officially working at the three institutions, only 12 subjects agreed to take part in the interview, but this was enough to form a point of view represented by the Romanian authorities and the German Embassy in Bucharest. Given the pandemic situation of the period, we could not obtain the agreement of several respondents, some of them giving the reason that they were not in the country and others not working in the office.

The structure of the interview consisted of 10 open questions and had three main objectives:

1. to express positions, not always official, on the subject of employment contracts of Romanian intermediary firms on the subject of labour recruitment for Germany;
2. personal position expressed, not always official, on the way of involvement, management and control of labour migration in the conditions of restriction of movement imposed by the Romanian Government;
3. the personal position, not always official, on the solutions and public policy plan to reduce the growing Romanian migration phenomenon.

The personal view expressed and not necessarily official was an advantage in getting an easier set of direct answers. As specialists in different fields of activity, respondents offered opinions, data and impressions gained from their own experience. In this respect, we opted for a semi-structured interview with open questions. The respondents who participated in the interview are between 34 and 62 years old, have higher education and live in Bucharest. Of the 12 respondents, 7 women and 5 men participated.

Summarizing the responses received on the topic researched from the interview data collection, the respondents unanimously identified a systemic vulnerability that directly affects the Romanian state authorities through the lack of centralised communication at inter-institutional level. In other words, in the years since the Revolution, Romania has been going through a major communication crisis between state institutions, with important data not being circulated and exploited centrally. Respondents are of the opinion that there is already important data on migration, but it stops at the level of one institution and the only transparent data are those issued by research institutions. However, scientific databases are insufficient without linking them to public data, and

this is a systemic problem. On major vulnerabilities, one respondent pointed out that the Ministry of Labour and Social Protection has enough data, which is, at most, used in the area of scientific research and publication, but only that. "There is a lot of data in every ministry, institutions and embassies, but there is a lack of data sharing, nobody centralises it so that we can see what others are doing or make our data available. Nobody is interested though. We operate in a system of institutions that don't communicate with each other, so we lack vision and common policies." Another respondent insisted on the re-establishment of a Ministry of Public Information with the main purpose of collecting and centralising all data. "Anyone who needs some official data should go to this database and find it out, and then this ministry could also track and evaluate some complex phenomena, such as migration.

Migration is not just about numbers, where some leave and others come, migration has deep social causes, and all these aspects are part of a series of data that we cannot easily track without thorough organisation." In this regard, a representative from the German Embassy in Bucharest gave an example of the case of Germany, which has several control institutions and complex information, adaptable to different requirements and phenomena that also concern the subject of migration. On this aspect, in Romania, existing data are not exploited to their full value because they stagnate or circulate extremely slowly. The position expressed by the respondents on this subject is also confirmed by some scientific papers which has pointed out in various scientific symposiums that the research and scientific data of researchers stop at the shelves or at most at some articles and journals that are not read enough. The Romanian government is too little interested in the value of these results. Lack of interest remains a general condition that would characterise even the ministries, as long as the government does not know the real problems of the country very well. The solution, according to respondents, would be centralisation through urgent digitalisation of the political and administrative institutional environment and urgent investment to eliminate the over-bureaucratisation of the administrative apparatus. "If public investments are launched late because of bureaucracy and cumbersome procedures, then it will be difficult both to revive the economy and to keep in the country (rural) part of the emigrants who returned to the country because of the pandemic" (ICCV Social Report, 2020:34). However, public investment has been slow to emerge due to the political instability caused by the change of government and the deepening divide between the vaccinated and unvaccinated through the collusion of political groups and interests. In this respect, Romania has not made up for lost time.

On another research objective, respondents are aware of the many contractual and delicate problems of Romanians working abroad and not only in Germany. Undeclared work, through seasonal work, is a real epidemic developed by systemic weaknesses. The fact is that the presence of Romanian companies for recruitment purposes has been encouraging undeclared work for many years, and the measures taken by the Romanian government are not effective in reducing or eliminating this phenomenon. A respondent working at the German Embassy believes that there are a number of vulnerabilities, including in the German legal system, in terms of discouraging undeclared work. "This probably suits everyone. Germany complains about immigrants, but economically it needs them and then federal governments don't get

involved." However, compared to Germany, Romania has not even bothered to combat undocumented migration because there is no clear legislation in place. Another respondent, an employee of the Ministry of Labour and Social Protection, said that this situation has been stagnating for many years and that so far the Parliament has not set out to build a set of laws to discourage illegal recruitment firms, quote: "[...] intermediary recruitment firms are directly responsible for the escalation of undeclared work in any European market. You as a foreign authority cannot regulate the Romanian problem, but only the one related to your own citizens. But if you get citizens from other countries, as we Romanians are for the Germans, then the problem is not in their court, but in ours. To be clear, without tough and clear legislation on this subject, nothing will change." The plan exists, but it still needs to be adopted as a legislative proposal in the parliamentary working groups, but as a priority, otherwise we run the risk of tabling bills that outlive the short life of Romanian governments, and when a new government comes in, everything starts all over again.

Another aspect included in the area of systemic vulnerabilities, unanimously stated by respondents, comes through the lack of concordance between the will of the authority and the deliberate violation of the rules. Mentioning here the restrictions imposed during that period throughout the Romanian territory, in reality they did not work. According to the Romanian Constitution, emergency ordinances become binding throughout Romania by the principle of national sovereignty, they apply to all those who fall under the laws, everywhere and without exception. Yet the press has shown how airlines have frequently broken the rules without being held accountable. I quote from the words of a respondent employed at the German Embassy: "How is this possible in a European country? In Germany, if something like this happened on the part of an airline, the entire management from the director down to the last representative in the leadership and management structure would resign within 24 hours. It is unimaginable for a sovereign state to have its provisions openly violated. The press showed their ignorance, and a whole world watched the impotence of the Romanian state". Against the backdrop of the dysfunction between law and reality, we deduce that beyond the medical crisis there is a deep political and authority crisis. The Romanian government has authority problems and is incapable of applying and enforcing its laws.

On the last point addressed in the interview guide, respondents offered different opinions on appropriate solutions to control migration and on the elimination of undeclared work. Quote: "Romania is a prisoner of its own traps. You cannot offer that set of solutions and public policies as long as the sovereignty of power and authority is not resolved. Romania is a special case in that there are laws, but nobody enforces them." The rights of Romanians abroad can be successfully represented by prestigious institutions, such as the Department of Romanians Abroad (D.R.P.), but illicit contracts, victims of human trafficking, exploitation of child labour and other serious problems of violation of Fundamental Human Rights can only be solved by the Authority of the Romanian State, i.e. by a stable Parliament and Government, with clear powers and efficient execution of decisions in any situation.

Another respondent is of the opinion that "The dysfunctional situation between the law and the sovereignty of power can only be resolved by amending the constitution, and

here the people must be called to vote and clearly establish how the checks and balances of powers in the state work. Without a clear allocation of power, the fundamental institutions of the state are in conflict due to constitutional confusion. There are laws, but the constitution does not clearly assign responsibility and enforcement to whom." Indeed, this principle of the rule of law cannot be resolved politically, rather by plebiscite, so the powers of control and law-making will not generate decisional confusion between omnipotence or limitation of power between the President and the Prime Minister or legislatively between Parliament and the Constitutional Court. Another line of opinion argues that: 'at the root of the problem is a lack of clear delimitation of legislation between national sovereignty and the application of European Union directives. This can be seen in the lack of congruence and consensus between the will from Brussels and national wills. Europe needs a European plebiscite to limit or uniformly extend the powers and boundaries between the centralised power of the Union and the national sovereignty of each Member State. Without such delimitations, the European institutions will not be able to harmonise legislation and will not be able to resolve the great social inequalities between countries, which are widening as time goes by, and the rich countries will become richer and the others poorer". Any mediation and harmonisation policy of the European Union is superfluous. "The effect obtained is the opposite of what is expected: the gap between rich and poor will deepen the more you try to reduce it" (Stănescu, 2013: 26). A legalization of these power structures can only be achieved by a plebiscite of all European citizens. A harmonisation of immigration legislation, the universalization of the rights of all European citizens to be treated equally, without discrimination, wherever they move to work in the European area is indeed a priority that the Union must urgently address.

4. Conclusions

After interviewing Romanian seasonal workers, I found out that most of them are people who used to work in other professional fields but, having lost their jobs, preferred to do something else to avoid severe poverty. From a broader perspective, most Romanians who choose to work abroad, as well as for the German environment, accept jobs that are under qualified compared to their training. On the other hand, the rush to move seasonal workers around Europe is a kind of recognition of their importance in keeping some wheels of the continent's economy in motion. According to the study, the profile of the typical fruit and vegetable picker is, approximately, between 26 and 55 years old, with an average basic education, a background as a skilled worker and a preference for outdoor work. However, Romanians who go out to seasonal work feel "unappreciated and disregarded".

As members of the European Union, Romania and Germany have an active social policy. Both countries use the term 'welfare state', a guarantee given by their basic laws; the welfare state is obliged to take measures for economic development and social protection, ensuring a decent living for Romanian seasonal workers.

After analysing all the responses received, there are two fundamental questions to which answers are expected:

1. Romania is facing difficulties in applying the law, or in other words, the Romanian Government does not have enough authority to make its decisions heard. The case of the airports during the lockdown is a vivid example of this, and the responsibility has been passed from the decision-makers to a masquerade that the media caught, ridiculing the authority of the political power in Romania. Until the government assumes to the end its powers of control and of fining the guilty parties for systematically violating official rules, until then we cannot extend the subject to other visions or solutions.
2. The problem of undeclared work for Romanian seasonal workers is not Germany's problem, but Romania's, which is currently incapable of coherence and capacity to manage its own challenges. The companies that illegally recruit Romanian seasonal workers are Romanian and fall under the exclusive jurisdiction of Romanian law and authority.

In answering the two research questions, Romanians in Germany face a number of challenges stemming from a multitude of causes and dysfunctions in terms of legislation, rights and communication. With the arrival of the Scholz government, discrimination against Romanians in the German press has decreased, as well as in political statements, but there is still a lot of legislative work to be done. The Romanian and German states need to strengthen their diplomatic and legislative ties to reduce undeclared work and ensure a suitable environment that guarantees better working and pension conditions for seasonal workers. On the other hand, the authority of the Romanian state must be strengthened and clearly asserted in times of medical and economic crisis. Otherwise, as seen in the Romanian airport crisis, the government risks being undermined by unenforced law and setting a dysfunctional precedent in the political system.

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I declare, on my own responsibility, that there is no conflict of interest in the production and publication of this article.

References

- Drăgan, C. (2021). The evolution of children in foster care, during the Covid-19 pandemic, in Abdullayev, T., & Imamguluyev, T., (eds.), 2nd International Baku Conference on Scientific Research, pp. 404-409.
- Duell, N., & Vetter, T. (2020). *The employment and social situation in Germany*. European Parliament.
- Fitzek, S. (2021). Problems and solutions of Romanian migration in UK, Germany and Austria during 2020. *Journal of Community Positive Practices*, XXI(1), 59-70. doi: 10.35782/JCPP.2021.1.05.
- Fitzek, S., (2020). *Bunăstarea ca model de aplicare în ideologia și programele de guvernare ale partidelor politice românești de centru-stânga după anii '90*. In Zamfir, E, Voicu, M., & Stănescu, M.S. (eds.), *Politici sociale în România după 30 de ani*, Bucharest: Romanian Academy Publishing.
- Gherghina, S., Ploeanu, A. P., & Necula, C. V. (2020). The Impact of Socio-Cultural Integration on Return Intentions: Evidence from a Survey on Romanian Migrants. *Journal of Immigrant & Refugee Studies*, 18(4), 515-528.
- Gould, E. D., & E. F. Klor (2015). The long-run effect of 9/11: Terrorism, backlash, and the assimilation of Muslim immigrants in the West. *The Economic Journal*, 126 (597), 2064–2114.
- Ley, S. (2014). „*Er muss weg aus diesem Land, einfach weg!*“. Deutschlandfunk. URL: <https://www.deutschlandfunkkultur.de/rumaenen-und-bulgaren-er-muss-weg-aus-diesem-land-einfach-100.html>. Accessed on 20th of June, 2021.
- Mantu, S. (2020). EU citizenship, free movement, and Covid-19 in Romania. *Frontiers in Human Dynamics*, 2, 594987.
- Moffitt, U., & Juang, L. P. (2019). Who is “German” and who is a “migrant?” Constructing Otherness in education and psychology research. *European Educational Research Journal*, 18(6), 656-674.
- Prömel, C. (2021). *Belonging or estrangement: The European refugee crisis and its effects on immigrant identity* (Diskussionsbeiträge No. 2021/16, Freie Universität Berlin).
- Schnabel, R. (2020). *Migrants' Access to Social Protection in Germany*. In *Migration and Social Protection in Europe and Beyond* (Volume 1) (pp. 179-193). Springer, Cham.
- Stănescu, S. M. (2013). *Statul bunăstării între supraviețuire, reformă și integrare europeană*. Pro Universitaria.
- Zamfir, E., (2020). Cuvânt înainte, in Zamfir, E, Voicu, M., Stănescu, M.S. (eds.), *Politici sociale în România după 30 de ani*, Bucharest: Romanian Academy Publishing.

Online sources:

- Rfi România <https://www.rfi.ro/social-120156-inghesuiala-aeroport-cluj-noua-ordonanta-militara> link accessed on 20th of February 2021.
- Romania insider (2019) - <https://www.romania-insider.com/romanians-germany-2019-statistics> - link accessed on 30th of September 2021.

- Raport social al ICCV (2020). Pandemia și standardul de viață. Politici de protecție socială, Bucharest: Romanian Academy Publishing 45 pp.
- Euroobserver Magazine: <https://euobserver.com/opinion/119328>, link accessed on 20th of June 2021.
- Sueddeutsche Zeitung Online: <https://www.sueddeutsche.de/politik/innen-ministertreffen-in-bruessel-friedrich-will-grenzkontrollen-fuer-osteuropaer-beibehalten-1.1836887> accessed on 20th of June 2021.
- Press Coverage of the Refugee and Migrant Crisis in the EU: A Content Analysis of Five European Countries: <https://www.unhcr.org/56bb369c9.pdf> accessed on 20th of June 2021.
- DeutscheWelle: <https://www.dw.com/en/romanian-workers-fight-for-their-wages/av-18642235> accessed on 20th of June 2021.
- Deutsches Rotes Kreuz: <https://www.drk-suchdienst.de/en/information-and-background-knowledge/history-of-the-grc-tracing-service/historical-background-ethnic-german-repatriates/> accessed on 20th of June 2021.

Primary databases:

- Atlas Social: România la 14 ani de la integrarea în Uniunea Europeană (2021). Infographics report produced by the Quality of Life Research Institute with the support of the Romanian Government.
- Source: Eurostat (2020) EU/EFTA citizens of working age who usually reside in another EU/EFTA country by citizenship and age (online data code: LFST_LMBPCITA) - https://ec.europa.eu/eurostat/databrowser/view/lfst_lmbpcita/default/table?lang=en link accessed on 24th of September 2021.
- Statista, Anzahl der Staatsbürger Rumäniens in den EU-Ländern 2020 [Dataset] <https://de.statista.com/statistik/daten/studie/870943/umfrage/rumaenen-in-den-laendern-der-eu/> link accessed on 20th of November 2021.
- DeStatis.de, (2021), Über Auswanderer aus Deutschland, <https://de.statista.com/statistik/daten/studie/157440/umfrage/auswanderung-aus-deutschland/> link accessed on 21st of December 2021.
- Statista, A, (2021), Number of immigrants in Germany in 2020, by country of origin: <https://www.statista.com/statistics/894238/immigrant-numbers-by-country-of-origin-germany/> link accessed on 5th of December 2021.
- Statista, B, (2021), Total net contributions receivable of occupational pension funds in Germany from 2004 to 2018, <https://www.statista.com/statistics/733069/pension-funds-net-contributions-receivable-germany/> link accessed on 22nd of December.
- Institutul Național de Statistică (2021), Comunicat de presă despre migrația românească
Bevölkerung in Privathaushalten 2019 nach Migrationshintergrund (28 July 2020) <https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bevoelkerung/Migration-Integration/Tabellen/migrationshintergrund-staatsangehoerigkeit-staaten.html> link accessed on 5th of October 2021.

¹ Link: <https://euobserver.com/opinion/119328> accessed on 20th of June 2021.

- ¹ Link: <https://www.sueddeutsche.de/politik/innenministertreffen-in-bruessel-friedrich-will-grenzkontrollen-fuer-osteuroepaeer-beibehalten-1.1836887>, accessed on 20th of June 2021.
- ¹ Link: <https://www.unhcr.org/56bb369c9.pdf>, accessed on 20th of June 2021.
- ¹ Link: <https://www.dw.com/en/romanian-workers-fight-for-their-wages/av-18642235> accessed on 20th of June 2021.
- ¹ Link: <https://www.romania-insider.com/romanians-germany-2019-statistics>, accessed on 30th of September 2021.

ANALYZING THE ROLE OF COLLABORATION AND PARTNERSHIPS IN IMPLEMENTING SUSTAINABLE DEVELOPMENT GOALS IN BANGLADESH

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Abstract: *In this globalized world, countries are highly inter-dependent for socio-economic development. It is more important for developing countries like Bangladesh because of the multidimensional nature of development issue that requires support from different corners particularly after being graduated to middle income country. Collaboration and partnerships expedite development process, enhance mutual trust, and build strong relation to explore new areas for assistance. This partnership is necessarily required when countries adopt global agenda. The agenda 2030 is a holistic approach that philosophizes the well-being and prosperity of humankind. In order to realize the benefits of this agenda and implement all 17 goals and its 169 targets, country needs support from various stakeholders. Apart from the public and private sectors from within, global actors including international organizations, different nations must act together to bring the benefit for all. This paper aims at analyzing the necessity of collaboration and partnership among the states and assessing how partnerships can help implement Sustainable Development Goals. This review article is prepared based on the secondary data collected from the various research articles, government publications, UN reading materials. The study finds that Bangladesh needs to strengthen regional and global partnership for all SDGs specially after graduation to middle income country.*

Keywords: *Sustainable Development Goals, South Asia, Cooperation, Challenge*

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Introduction

Cooperative relations and partnerships are vital for the economic and social upliftment of the impoverished people. It is more important for the South Asian region because of association with the multi-dimensional development issues such as poverty, inequality, social structure and caste system, diversity of religious practices, low level of education. Data say that most of the poor of the world live here. South Asia comprises of countries like Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka. The economies of the South Asian region are not globalized by world standard especially when compared to neighboring Southeast Asia or China. In this age of cooperation and competition it is an irony that South Asian economies are fighting their battles individually and independent of each other because of political tensions. Challenges to Regionalism Issues of terrorism, religious radicalism, assertion of ethno-national identity have made the states adopt a cautious policy towards the issue of regional integration (Kumar, 2005).

Researchers comment that the progress of a country and regions depends on the shared sense and values of the history that helps nurture the regional identity and uphold the fate of regional partnership. It is found that sense of shared history is absent in case of South Asia that makes difficult to shape the regional identity (Pattanaik, 2011). However, people of the region often refer them as the people of sub-continent that becomes irrelevant because of individual national identifies.

Although the notion of regional partnership and economic integration is not a new idea, there have been many deals on various issues of common interests and concern among the state since the modern state system came into being and being preferred rather than functioning as self-contained units.

Systematic studies have been conducted to assess the need for South Asian partnership in implementation of the Sustainable Development Goals (SDGs), keeping in mind the rapidly changing geo-strategic climate that affects the inter-state relations (UN, 2015a). Against this backdrop, this research intends to recommend the right perspective for the South Asian countries reflecting the geo-strategic reality and dynamics. Sustainable Development Goals, adopted by all United Nations Member States postulates a shared blueprint that advocates for peace and prosperity for people and the planet, now and into the future⁶. Because of the nature of SDGs and materializing the philosophy of the agenda, the global partnership is mandatorily required.

Since its inception, the SDGs have been aligned with the national planning strategies and efforts are being made to localize SDGs (UN, 2015). The Government of Bangladesh has constituted National Data Coordination Committee (NDCC) to identify data gaps, to ensure the availability of quality data and to monitor the domestic and international commitments (Un, 2015b). The success stories of SDGs implementation will help preparing the SDGs components of the 8th Five Year Plan and assist devising strategies for SDGs implementation in the flagship Plan document.

⁶ The United Nations General Assembly adopted the *Resolution No. A/70/L.1: Transforming our world: the 2030 Agenda for Sustainable Development* on 25th September 2015.

Bangladesh has shown its significant rise in GDP growth from 5.1 Per cent in 2014-2015 to 6.91 in 2018-2019 (GED, 2020). However, this growth is encircled by significant uncertainties because of the recent outbreak of COVID-19 pandemic and to offset this international partnership can be beneficial.

Problem statement

The key philosophy 'leave no one behind' is the central issue of 17 Sustainable Development Goals and 169 targets. These goals and targets are universal, inseparable and interlinked in terms of nature and means of implementation (Karim, 2021a). The goal 17 states to strengthen the means of implementation and revitalize the global partnership for sustainable development encourages enhancing North-South, South-South, regional and international cooperation for implementing the SDGs (UN, 2015b). Revitalizing the global partnership is deemed to facilitate a comprehensive global engagement for collective implementation and making a common platform for governments, civil society, NGOs, private sector, UN systems to work together and mobile available resources. It is often underscored that middle-income countries will face significant challenges to achieve sustainable development (Karim, 2021b; UN, 2015; 2015b). It is also suggested that efforts to address the ongoing challenges should be strengthened that requires the the exchange of experiences, effective coordination, and better and focused support of the UN development system, the international financial institutions, regional organizations, and other important stakeholders (UN, 2015a). Recent data signifies the poor achievement in SDGs that South Asian regions is far from way to achieve some goals and is in opposite direction for some (SDG Index and Dashboards Report, 2020). Researchers at CPD noticed encouraged to widen the ownership of SDGS and issue-based politics in order to essentially get most out of targets. They also remarked that these targets may remain as targets only unless these goals are owned by the top-level political leaderships in the region (CPD, 2016). In order to provide useful opportunities for mutual learning, including through voluntary reviews and share best practices and discussion on shared targets, appropriate follow-up and review at the regional and sub-regional levels are widely suggested. This process intends to mobilize support to overcome challenges and correctly identify emerging issues. This is a universal agenda and important to address on mutual trust and understanding among all states (UN, 2015b).

Bangladesh needs to overcome a few challenges to receive further international cooperation (GED, 2020). Firstly, there is a lack of data for indicators for monitoring the progress on SDG targets, especially those related to international cooperation. Secondly, there is insufficient domestic spending on key areas such as social protection (SDG 1), health (SDG 3) and education (SDG 4). Thirdly, the absorptive capacity of different line ministries impedes disbursement of funds despite donor commitments. Fourthly, the executing agencies lack adequate capacity and need significant capacity building. In this context, international cooperation in several areas including FDI, promoting bilateral free trade areas (FTAs) and other trade agreements with potential countries, trade and private sector development, identifying and removing barriers to investment, preventing tax avoidance and evasion are pronounced more as Bangladesh moves forward. Bangladesh is active member of several regional (e.g., BBIN, BCIM,

SAARC, BIMSTEC, APTA) and international organizations (e.g., WTO, WCO) and initiatives. However, achieving the SDGs largely depend on meaningful international partnership and availability of resources including external resources. The ASEAN (Association of Southeast Asian Nations) is thought as an example of using potentials opportunities. Their development mechanism can be followed to accelerate the process of regional integration.

Rationale of the study

There are some gaps in research on South Asian Partnership, especially for implementation of the SDGs. One of every five people in the world lives in South Asia and it is the home to one of the oldest civilizations in the world. Historically South Asia has served as a melting pot of cultural, social, racial, ethnic, linguistic, and religious diversities that has bred a sense of tolerance and amity in the region. South Asia has also witnessed innumerable armed conflicts, social turmoil, and widespread violence resulting in the rise of communalism and fundamentalism creating intra-state and inter-state conflicts of many manifestations. Disputes on sharing of natural endowments of the region and the region's inability to derive economic advantages by harnessing factors of proximity and contiguity have aggravated regional harmony. Though in today's concept of global economy there are opportunities to take, the ongoing conflicts have inhibited the full exploitation of the enormous potential of the region to promote political and social harmony and economic growth for the greater benefit of the peoples of the region. In the economical ambit relations have improved but geo-strategic competition remains unabated. The future peace and prosperity of South Asia hinges on accelerated regional cooperation bonded to peace and development. Therefore, this research intends to assess the need for South Asian partnership in implementation of the Sustainable Development Goals (SDGs) in that prism, in support for appropriate policy formulation.

Objectives of the study

The objectives of this study are:

- a) to assess the opportunities for South Asian partnership in implementation of the Sustainable Development Goals (SDGs);
- b) to identify the challenges confronting South Asian partnership and collaboration.
- c) to recommend the way forward for forging a mutually benefitted collaboration and partnership.

Methodology

The research employed qualitative methods for data collection gaining insights and understanding on underlying reasons and motivations. Secondary data was collected from the published books, journals, reports of international organizations and different ministries/divisions of Government of Bangladesh, augmented by personal recollection from different sources. Using the qualitative approach based on interpretative and

participatory perspective (Merriam, 1998) the researcher extracted the experiences, perceptions, and understandings of the respondents. This qualitative data collection approach is effective when the researcher has little knowledge about the area of research (Liamputpong and Ezzy, 2005). Collected data was categorized and analyzed manually using qualitative content analysis (Mayring, 2000) to generate pertinent themes. The researcher intends to present the thematic analysis dispassionately purely on factual reporting.

Limitations

The researching issue attracts attention for enhancing collaboration through partnership. However, there is a dearth of sufficient secondary sources, particularly research on South Asian partnership. Data were collected during COVID-19 outbreak that inhibited to collect primary data.

Discussion and Analysis

Although there are some similarities and difference in undertaking policies, strategies, and approaches for utilizing aid and developmental cooperation, South Asian nations have common interest to explicitly support and committee to implement the 2030 Agenda for Sustainable Development through strengthening the global partnership for sustainable development. The SDG 17 articulates the means of implementation – namely finance, technology, capacity-building, trade and systemic issues. It also aims to enhance North-South and South-South cooperation by providing support for implementing national plans to achieve the targets. Strengthening finance, technological knowledge sharing and facilitation mechanisms; enhancing international support for capacity building; an open, non-discriminatory, and equitable trading system, and improving global macro-economic stability are powerful tools for the achievement of SDG 17.

Figure 1: Inter-linkages of SDGs



Countries from this region should work jointly to their contribution for implementing SDGs through sharing of knowledge and information, integrating cooperation to enhance development process, promotion of multi-stakeholders' involvement and adoption of innovative approaches and best practices. They should also prioritize areas for integration and align with their national agenda. In this paper, the researcher presents the findings under following categories:

- (a) Bangladesh's experience in development cooperation for attaining SDGs;
- (b) Global and regional trends and opportunities for collaboration and partnership, particularly for South Asia in implementation of the SDGs;
- (c) Issues and challenges confronting development cooperation in South Asia;
- (d) Recommendations to enhance regional and global cooperation to achieve SDGs.

Bangladesh's experience in development cooperation for attaining SDGs

The analytical and comprehensive study on international cooperation for achieving SDGs conducted by Bangladesh government identifies the provision of cooperation, potential areas of development partners where they can contribute and provide assistance to Bangladesh. The major areas are as follows:

Financial Strategy

The study "SDGs Need Assessment and Financing Strategy: Bangladesh Perspective" estimates an additional amount of investment by public sectors with an average of US\$ 66.32 billion per year. The total cost would be worth of total 19.75 per cent of the total GDP that would require across the period of 2016-17 to 2029-30 (UN, 2015a). It also estimated that Bangladesh will face the big investment gaps in some important areas such as poverty alleviation, sustainable energy, ICT and public service delivery and climate change adaptation. The effective development cooperation mechanism can only minimize these gaps.

Figure 2: Financing of SDG

	Baseline (2015)	Current Status
Net ODA to Bangladesh	3.00 billion US\$	4.96 billion US\$ (ERD, 2018)
Government Revenue as % of GDP	9.6%	12.45% (FY 2019)
Budget funded by Domestic Taxes	63%	65.44% (FY 2019)
FDI as % of GNI	1.1%	1.23% (FY 2019)
Remittance as % of GDP	6.74%	5.4% (FY 2019)

Technological support

Although the government's vision 'Digital Bangladesh' has brought the balance between growth and equity, and created the ICT-induced enabling environment, Bangladesh needs to have global partnership to build a knowledge-based society in line with the advancement of the 4th Industrial Revolution (4IR) because the country still is entirely dependent on other country's technology and is far away of self-sufficient homegrown technology (UN, 2015b).

Capacity development

The project titled "Enhancement of Public Administration Skills to Achieve Sustainable Development Goals" has been approved by the government in order to enhance the capacity of public administration. It is totally funded by government and targets to increase the capacity and efficiency of the public employees so that their capacity helps achieve SDGs. The head of the government, honorable Minister had the special attention to undertake this project for the government employees (UN, 2015a).

Trade and commerce

After graduation from LDC to MIC, Bangladesh needs to take special attention on trade and commerce as the preferential treatment would not get. As an LDC, Bangladesh was entitled to get preference in four categories which are (a) various WTO provisions providing special and differential treatment (SDT) (b) autonomous, non-reciprocal initiatives through various countries' Generalized System of Preferences (GSP) schemes (c) preferential market access initiatives of various regional trade agreements (RTAs) (d) bilateral trade initiatives (UN, 2015b). These facilities gave Bangladesh advantage for preferential market access which would be a competitive one. Against backdrop, cooperation with the developed countries is needed for sustaining and expanding trade capacity that is necessarily linked to SDGs implementation.

Policy and Institutional Coherence

The Social Security policy that of comprises the broader Social Development Framework (SDF) by the government must be treated as a core element of the other policies and programmes for fulfilling the key philosophy of the agenda 2030. Recently approved second Perspective Plan 2021-2041 is an important policy document to guide the SDG implementation (UN, 2015b). It clearly outlines the pathways of achieving the vision of Upper Middle-Income Country (UMIC) status by 2031, and High-Income Country (HIC) status by 2041 with an emphasize on eliminating the extreme poverty. Moreover, the government is committed to incorporate and achieve most the targets stated in the 8th FYP (GED, 2020).

Multi-stakeholder Partnerships

Achieving SDGs is not an issue of government alone because of its multiplicity of nature and mammoth tasks for proper implementation and realize the benefit. It

requires multi-stakeholders' involvement incorporating both public and private sectors by and large. It likewise necessitates the partnerships and collaboration of NGOs, development partners. A collaborative framework has been devised on four pillars (UN, 2015b). Evidence informed policy making, financial security and prioritization, acceleration of policy implementation and fostering a whole-of-society approach are the four pillars that may be at the center of meaningful partnership which can be implemented through effective action plan for various projects, programmes, and activities.

Localization of SDGs in the context of Bangladesh

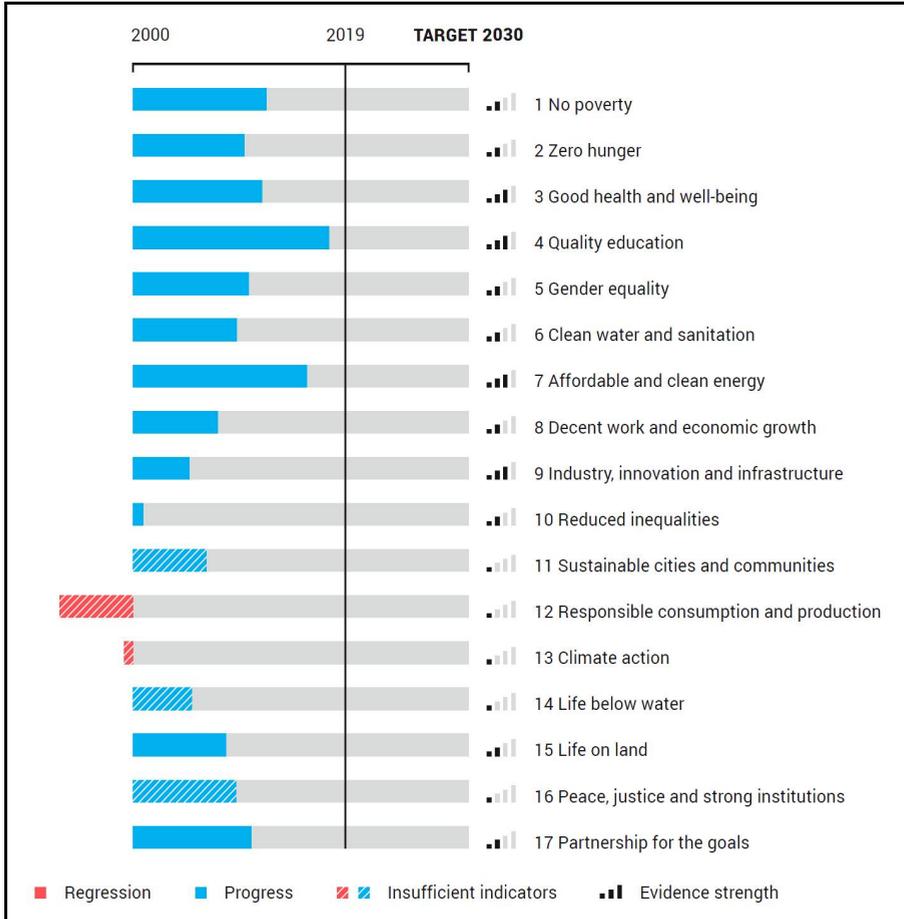
It is important to mobilize and engage local bodies in order to realize the benefit of SDGs and implement the initiatives locally. Researchers often emphasized on localizing the SDGs where government is also on the process particularly at District and Upazila level. In this regard, the Cabinet division has approved 40 (39+1) priority indicators for localization of SDGs; 39 indicators from 17 goals which are crucial for the local level of our country and implementation of whom would have reinforcing effects on other targets as well. 'Leave no one behind' stated as the rest one (+1) has been emphasized for some specific districts having different targets because of the socio-economic context and ground reality of geographical locations (GED, 2020; Islam, 2020; UN, 2015a, 2015b).

Key Areas of International Cooperation for Bangladesh

Government continuously reviews achievement of SDGs targets and the provisions of global cooperation. A number of potential areas has been identified needing partnership for achievement of SDGs. Tax reform and decentralization of revenue collection is considered as one of the important means of SDGs implementation. However, the process needs policy reforms, implementation mechanism with technical and technological advancement that requires assistance of partnership. For ODA, international cooperation is needed to develop capacity of the implementing agencies to efficiently utilize the funds. Similarly, in terms of FDI, Bangladesh needs to identify potential areas for utilizing it, particularly for investment in business and industrialization in massive scale in order to boost economy. Private sectors must be engaged with the global multi-national companies to attract invest for booming private sector investment (UN, 2015a). It is argued that Bangladesh needs to monitor debt service for debt sustainably that can be carried out with the association of development partners. Since Bangladesh is changing its transformation from the concessional finance to finances of more commercial nature that involves much higher debt service liabilities. The partnership support should act as an early warning system to help avoid any possible systemic shock to the Bangladesh economy. The study suggests Bangladesh to adopt reference benchmarks to assess performance in order to scale up the South-South cooperation. Developing a central database for common reference is needed so that systematic data tracking can be used for effective understanding of the extent of the cooperation and further engagement. The most vital issue is the trade

where Bangladesh needs active and effective engagement in negotiation in various issues newly raised because graduation to middle income country. This cooperation demands in some sectors particularly apparel industry and necessitates to diversify export basket non-RMG products and destination outside USA and EU (Karim, 2020; UN, 2015b).

Figure 3: Snapshot of SDG progress in 2019 in the Asia-Pacific region



Source: UN ESCAP Asia and the Pacific SDG Progress Report, 2020

Global and regional trends and opportunities for collaboration and partnership particularly for South Asia in implementation of the SDGs

South Asia as region has all potential to take the leverage of the synergies and externalities between economic, social, and environmental development. However, UNESCAP observes that the region suffers from the inability to exploit these externalities alongside significant structural imbalances. South Asia lags behind other sub-regions in several indicators of development and the international development partners suggest seven key policy priority areas of intervention for the SDGs in South Asia:

Industrialization and business for creation of jobs

Industrialization (SDG9), which is termed as booster for economic growth is highly linked to creating job opportunities (SDG8) that ultimately contributes to poverty alleviation (SDG1). The study suggests that the South Asian region can promote more than 56 million additional jobs that may lift about 71 million people out of poverty. This shows the importance of South Asian partnership particularly for establishing a sustainable industrialization to leverage the spillover effects. Partnership is also expected to create productive capacity, maintain value chain, and enhance business growth. Moreover, this needs to accelerate sustainable infrastructural development specially transport infrastructure (SDG9), health and sanitation (SDG6), electricity (SDG7) and most importantly ICT.

Provide universal access to education and health to harness the youth bulge

To optimize the demographic dividend of the youth population of South Asia, emphasis should be given for higher investment in health coverage (SDG 3) and quality education with due emphasis on vocational training opportunities (SDG 4). In addition, more investments are needed to address the projected skills deficit of the region. The region also needs to emphasize the importance of the rights-based approach to universal education while ensuring the availability of quality education and training.

Ensuring food security

Addressing food security and hunger are two core concerns and development challenges of the South Asian countries. SDG 2 addresses food security and the eradication of hunger. South Asian countries can further strengthen the collective food security of the region by operationalizing the SAARC Food Bank, liberalizing intra-regional food trade, and designing collaborative research and development (R&D) on agricultural productivity.

Promote gender equality and women's entrepreneurship

Gender equality and gender mainstreaming are two of the most critical development challenges of the region. Over the years, some major improvements have been noticed in terms of achieving gender parity in education, but the region still lags in terms of economic and political empowerment of women and gender equality (SDG 5) (Islam, 2020; UN, 2015b). New and innovative policy instruments need to be installed to develop women's entrepreneurship through gender-responsive policies, create gender-based budgets, install one-stop advice centers, incentivize credit schemes, and support innovative use of capacity-building to consolidate the empowerment process of women.

Enhancing environmental sustainability

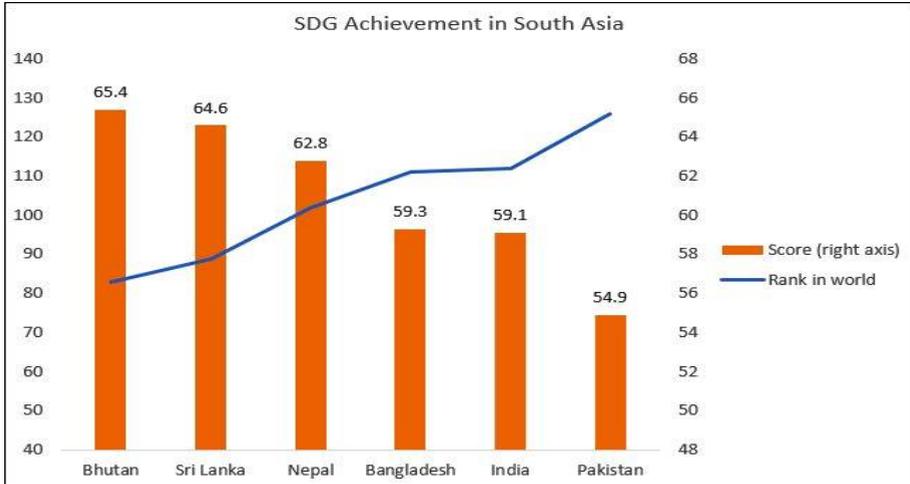
South Asia, like many other regions of the world, suffers from environmental sustainability challenges which directly affect growth and widen development gaps (UN, 2015a). As a policy intervention, the region demands environmental sustainability through the increasing shift towards the use of renewable energy sources and cleaner gas-based fuels, and introduction of new technology to reduce emissions from conventional electricity generation. Industries also need to be encouraged and brought under legal frameworks to mandate the use of pollution free energy, recycling, and cogeneration approaches. Wider campaigns need to be initiated to encourage a change in lifestyle towards the principles of "3 Rs" - reduce, reuse, and recycle.

Issues and challenges confronting development cooperation in South Asia

The corona virus pandemic underscores the profound unsustainability of today's world. It exposes the chronic underinvestment in human health and well-being and the consequences of relentless exploitation of biodiversity and the natural environment. Probably, one of the biggest impacts of COVID-19 will be on the international cooperation and partnership (SDG 17) due to rise of conservative ideology that will prevent countries from benefiting from increased trade, technology transfer, investment, and foreign aid (UN, 2015b).

Based on the current rate of progress, according to UNESCAP (2019) estimates, Asia and the Pacific will not be able to attain any of the 17 SDGs by 2030 despite significant improvement. For example, although notable progress has been made in the areas of SDG 1, 4 and 7, this will not be enough to reach targets. For at least eight SDGs, including SDG 2, 9–11, 13–16, progress is slow or stagnant. Three SDGs 6, 8 and 12 have regressed. ESCAP (2019) also highlighted the lack of progress attaining SDG 17, which may undermine progress towards the attainment of all other SDGs. This assessment should be an early warning for global and regional leaders in Asia and the Pacific. At the same time, it is also important to note that these estimates are based on insufficient data. Data gaps exist for at least two-thirds of the indicators, particularly those concerning environmental and social areas.

Figure 4: South Asia is performing poorly on meeting the SDGs, Source: SDG Index and Dashboards Report



Even with the best practices emanating from the region, there are issues and challenges that deserve attention, including how to: improve effectiveness in development cooperation; increase transparency and data availability; address the bias towards the economic sector – all of which have been compounded by a lack of institutionalized regional cooperation mechanisms.

It is argued that conventional wisdom based on new trade theory can hardly foster intra-regional trade because trade barriers. These barriers include high transportation costs, poor infrastructure in cross border areas, poor institutional mechanism that penalizes trade integration among the region UNESCAP (2018a). Thus, the regional partnership shows its importance and necessitates formulation of new policies to benefit the region.

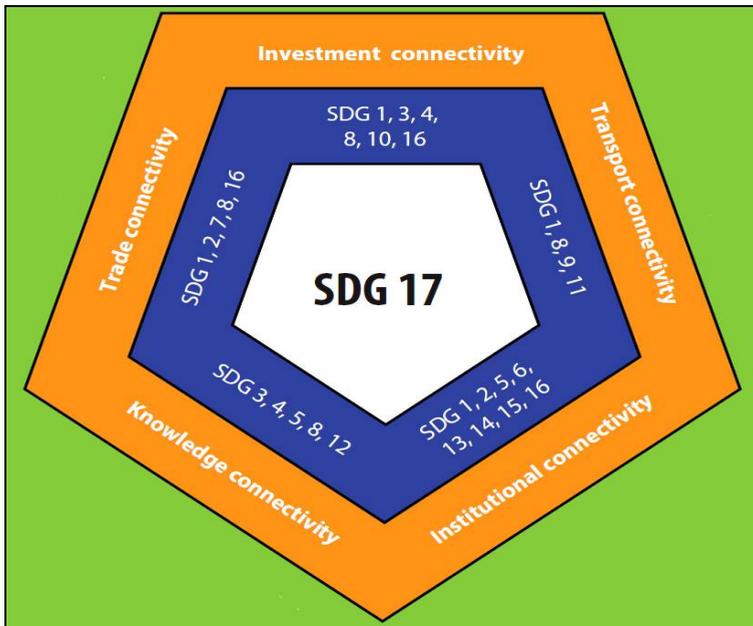
Recommendations to enhance South Asian cooperation to achieve SDGs

Many of the SDG targets are not only interconnected but also transnational. For example, goal and targets on climate change are not possible to be achieved without regional and global efforts. While SDG 13 is the specific goal on climate change, there are many targets and indicators in other goals, which are connected to climate change including SDG 1, 2, 3, 6, 7, 8, 9, 12, 14, 15 which are linked to basic needs of people. Therefore, two points are quite clear: (i) it is not possible to achieve some SDG targets without considering some other targets; and (ii) it is not possible for individual countries to achieve some SDG targets without cooperative and concerted efforts from other countries in the region and the world (Islam, 2020).

Regional priorities

As the global discourse on the 2030 Agenda continues, it is becoming evident that due to varying levels of past progress, different regions of the world are now facing diverse problems and have distinct priorities. For the countries of the South Asian region, seven key policy priorities have been identified (UNESCAP, 2018a). These are: (i) generating employment; (ii) developing infrastructure; (iii) ensuring universal access to education and health; (iv) providing universal social protection and financial inclusion; (v) guaranteeing food security; (vi) establishing gender equality; and (vii) environmental sustainability (UNESCAP, 2018a). In addition to these shared regional priorities, several other emerging and longstanding regional issues are critically important for implementing the SDGs in South Asia, especially from the vantage point of Bangladesh. These include: (i) the influx of more than one million Rohingyas from Myanmar into Bangladesh (SDG 10.7); (ii) the cross-border drug trafficking (SDG 3.5); (iii) the equitable sharing of rivers that flow from India into Bangladesh (SDG 6.6); (iv) the protection of endangered species of birds and animals in the Sundarbans to prevent their extinction (SDG 15.5); and (v) the evolving regional security risks and terrorism threats (SDG 16.a). Bangladesh needs to make full use of the momentum of the discourse on the 2030 Agenda and carry forward the discussions on these serious issues (Islam, 2020; UN, 2015; UNESCAP, 2017).

Figure 5: Regional Priorities & Connectivities



The regional priorities for SDG implementation in South Asia can be addressed by making use of connectivities as regional instruments. In this context, five key connectivities need to be considered: (i) trade connectivity; (ii) investment connectivity; (iii) transport connectivity; (iv) institutional connectivity; and (v) knowledge connectivity. Using the Five-connectivity Model of Regional Cooperation, it is possible to address all the seven regional priorities facing South Asia, as well as expedite the implementation of all 17 SDGs.

Regional organizations

In Asia, regional cooperation organizations such as the Association of Southeast Asian Nations (ASEAN) is actively working to coordinate the implementation process. ASEAN has integrated the SDGs with its vision for development “ASEAN Vision 2025”. One point of similarity and complementarity between the ASEAN Vision 2025 and the SDG 2030 Agenda is that both aim for the ideology of ‘leave no one behind’ (UNESCAP, 2017). ASEAN has also emphasized institutional capacity building to attain the ASEAN Vision 2025. (Karim, 2021a)

Unlike ASEAN, SAARC has not made any significant effort towards implementing the SDGs at the regional level due to internal management and organization issues. However, there are opportunities for SAARC to initiate regional strategies towards implementing the SDGs. For example, SAARC could support initiatives to promote cooperation by providing public goods such as regional transport, connectivity, information, communications technology, energy, and infrastructure, and by supporting food security. SAARC could additionally coordinate follow-up and review mechanisms at the sub-national level, which would add value to the SDG Asia-Pacific follow-up and review mechanism under the Asia-Pacific Forum on Sustainable Development (APFSD) (UNESCAP, 2017).

South-South Cooperation

Bangladesh has tremendous success in some areas particularly ICT-enabled systems such multi-media classroom, e-health, e-payments, ICT training, digital signature which are attracted by neighboring countries like Maldives and Bhutan. They have teamed up with the Access to Information (a2i) project and adopt these initiatives in their countries. Apart from South Asian countries, Peru came on agreement to use Bangladeshi SDG tracker after its successful operation in Bangladesh. Some other countries across South America and Africa such as Paraguay, Tunisia, Brazil, Namibia, Malawi, Nigeria, Colombia, Morocco, Uganda and Ecuador have shown their interest in doing the same. This collaboration utilizes the benefit of the South-South Network for Public Service Innovation (SSN4PSI) that launched in 2017 by the UN Office for South-South Cooperation. This collaboration network serves as not only opportunity for building rapport with fellow developing countries but also allows Bangladesh to take lead to forge various partnerships between other South and Southeast countries.

South Asia Economic Union

In this globalized world, most regions move forward for greater economic integration while South Asian countries lag behind. Collaboration particularly South Asia Economic Union needs to be formed to ensure transformation of the region to a peaceful, stable prosperous region. South Asia is found in the new regim of regional integration with four processes for example, (i) market integration through trade in goods and services; (ii) growth integration which is economic growth processes of the region; (iii) investment integration through promotion of regional investment and trade nexus; and (iv) policy integration can be done through harmonization of economic and trade policies. It is noticed that economic collaboration enhances bargaining power among the state for trade potentials, creating appropriate strategies, effective and clear roadmap of development. ASEAN is found as the better cooperation model as the strong partners tend to take care of their weaker ones in many ways. ADB's SASEC is the most discussed South Asia Growth Zone model that is based on four 'Key pillars'. The model advocates to invest in cross border infrastructure, to eliminate financial obstacle, to invest in higher trade and to increase regional public goods.

Conclusion

South Asia as a region is one of the farthest behind in the world in terms of sustainable development. There is a clear rationale for cooperation among the countries of this region. Unfortunately, some of the South Asian institutional mechanisms for cooperation could not be successful due to lack of political will. As a result, South Asian countries could not benefit from such alliances. However, for the 2030 Development Agenda to be successful, countries have to come together. The success of such initiatives will largely depend on the active participation of all countries in the region and their willingness to implement the SDGs successfully.

The achievement of the Agenda 2030 necessitates numerous actions and activities enumerating more than the sum of national actions. It seeks attention for collaborative efforts to address both regional and global issues. Regional action can support national plans and is essential to address trans boundary challenges (Karim, 2021a; 2021b). Although realities significantly vary region by region, there is a common need for enhanced regional action to avoid the reversal of gains made during periods of economic growth and achieve the scale of change necessary to build resilient and inclusive societies. Equipped with robust intergovernmental mandates, the UN Regional Commissions are ideally positioned to assist Member States in pursuing their national development objectives, by supporting monitoring efforts, designing integrated and evidence-based policy responses, and building the necessary partnerships and technical capacity for effective implementation.

References

Bangladesh Planning Commission (2020) Sustainable Development Goals: Bangladesh Progress Report 2020. Dhaka: General Economics Division. Available at:

- https://www.bd.undp.org/content/dam/bangladesh/docs/sdg/SDGs-Bangladesh_Progress_Report%202020.pdf (Accessed: 14 January 2021).
- Chakravarti, SR (1994). *Foreign policy of Bangladesh*. New Delhi: Har-Anand Publications.
- General Economic Division (GED) (2020). *Revised Monitoring and Evaluation Framework of the Sustainable Development Goals: Bangladesh Perspectives*
- Hussain, M (2007). *South Asian Tangle*. Dhaka, Palok Publishers & Bangladesh Research Forum.
- Islam, MT (2020) Bangladesh: Towards the Localisation of the Sustainable Development Goals, LSE blog, Available at <https://blogs.lse.ac.uk/southasia/2020/02/25/bangladesh-towards-the-localisation-of-the-sustainable-development-goals/>
- Karim, MR (2020). Global partnership will help Bangladesh revive COVID-hit economy, available at <https://southasiamonitor.org/spotlight/global-partnerships-will-help-bangladesh-revive-covid-hit-economy>
- Karim, MR (2021a) UN Should redesign sustainable development goals, revise targets under covid challenge, South Asia Monitor Newsletter, vol. v, issue XVIII, September 15, Available <https://www.southasiamonitor.org/un-watch/un-should-resign-sustainable-development-goals-revise-targets-under-covid-challenge>
- Karim, MR (2021b) Unsustainability of Sustainable Development Goals, The Khabarhub (September 3), Available at: <https://english.khabarhub.com/2021/03/206577/>
- Karim MR & Islam, MT (2021). *Interplay of Disaster Management and Sustainable Development: Legislative and Institutional Role of the Government of Bangladesh* (unpublished)
- Khatun F & Saadat S (2020). *Regional Cooperation for SDG Implementation - A Model for South Asia*. Dhaka: Centre for Policy Dialogue (CPD).
- Kumar, R (2005). *South Asian union: problems, possibilities, and prospects*. New Delhi: Manas.
- Liamputtong, P Ezzy, D (2005) *Qualitative Research Methods (2nded.)*. Oxford University Press, London.
- Mayring, P. (2000). *Qualitative Content Analysis [28 Paragraphs]*. Forum: Qualitative Social Research, 1(2).
- Merriam, S (1998) *Qualitative Research, and case study applications in education*. Jossey Bass, San Francisco.
- Pattanaik, S (2011). *South Asia: envisioning a regional future*. New Delhi: Institute ForDefence Studies & Analyses.
- UN (2015a). Resolution No. A/70/L.1 adopted by the General Assembly. UN: Seventieth Session. Available at: https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_RES_70_1_E.pdf (Accessed: 14 January 2021).
- UN (2015b). *Transforming our world: the 2030 Agenda for Sustainable Development*. UN: Department of Economic and Social Affairs. Available at: <https://www.sdgs.un.org/2030agenda> (Accessed: 14 January 2021).

- UNESCAP (2018a). Achieving the Sustainable Development Goals in South Asia: Key Policy Priorities and Implementation Challenges. New Delhi: United Nations Economic and Social Commission for Asia and the Pacific. Retrieved from: https://www.unescap.org/sites/default/files/publications/UNESCAP%20-%20SRO-SSWA%20SDG%20Report_Sep2018.pdf [Accessed: 23 February 2021]
- UNESCAP (2018b). Unlocking the Potential of Regional Economic Cooperation and Integration in South Asia: Potential, Challenges and the Way Forward. New Delhi: United Nations Economic and Social Commission for Asia and the Pacific. Retrieved from: https://www.unescap.org/sites/default/files/publications/UNESCAP_RECII%20Report_0_Sep2018.pdf [accessed: 23 February 2021].
- Vohra, NN (2001). Culture, democracy, and development in South Asia. New Delhi: Shipra.

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THE SOCIAL IMPACT OF CONTRAVENTIONS AND ITS ACTIVE SUBJECT – THE INDIVIDUAL – IN THE REPUBLIC OF MOLDOVA

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***Abstract:** The protection of social values is a priority mission of the state, by virtue of which the legislator elaborates a set of legal norms meant to defend the social and legal order. The social danger of contraventions expresses the violation of the most important social values that are protected by the contravention law, causing damages to individuals and legal entities. This fact justifies the interest of the legislator to sanction this type of illicit acts in order to restore the injured social and legal order. The correct legal qualification of the antisocial deed through the prism of the constitutive elements of contravention has a great importance in order to ensure a legal and an appropriate application of the institution of contravention liability. This scientific work particularly highlights one of the basic elements of contravention – the subject. The first part of this study reveals the notion and general conditions of the subject of contravention in correlation with the contravention legislation, pointing out the varieties of subjects, while the second part is meant for the special subject and the passive subject of contravention.*

***Keywords:** contravention; active subject; passive subject; constitutive element; individual; contravener; victim*

1. Introduction

The existence and evolution of any society is based on a set of rules that form a legal system with the mission of regulating the social relations born between individuals. Within this system of norms, an important role is reserved for the rules that impose a certain behavior and establish the consequences of disobedience to them. The individuals and their deeds must be guided by well-established precepts which defend the most important social values. Without these rules, the state and society are inconceivable.

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The protection of social values is a priority mission of the state, by virtue of which the legislator elaborates a set of legal norms meant to defend the social and legal order, which cannot be achieved without the contribution of the contravention law. The applicability of the contraventions norms enjoys a great upsurge, taking into account the diversity of antisocial deeds that we encounter daily, the degree of danger generated by their commission, the way the state authorities react to these violations, as well as the development of solutions to prevent and combat the contraventions, as the most common antisocial deeds.

Contravention is a negative, mass socio-legal phenomenon. Its social character emphasizes that the individuals are the ones who directly commit contraventions, by virtue of some internal or external factors that determine them to deviate from the imperatives of the law and, accordingly, the ones who are held liable for the contraventions committed. Its nature as a legal phenomenon embodies the express regulation of the deeds that are qualified by the legislator as contraventions and also the appropriate sanctioning measures for their commission.

The illicit character is an important feature of the contraventions. They are prohibited by the Contravention Code of the Republic of Moldova, because the contravention acts disorganize the system of social relations, having a harmful effect. The European Court of Human Rights appreciates that the commission of a contravention infringes on the values of the whole community, as long as the provision that is violated by the commission of the contravention has a general nature and is not addressed to a specific group of people, but to all citizens; this provision establishes a certain behavior, and the sanctions established in case of its disobedience is intended both to prevent and to repress (Pantea & Antoci, 2020).

Contraventions are characterized by their antisocial character. This is the real basis for engaging the contravention liability. A contravention deed is the external manifestation of the behavior of an individual that takes the form of a socially dangerous action or inaction. The social danger of contraventions expresses the violation of the most important social values that are protected by the contravention law, causing damages to individuals and legal entities. This fact justifies the interest of the legislator to sanction this type of illicit acts in order to restore the injured social and legal order.

The character and the degree of social danger of a contravention represents its material element and reveals its social essence to cause a damage to the values protected by the contravention law. The material element of contravention is the main criterion for distinguishing the contravention from other antisocial acts, such as: crime, administrative or disciplinary misconduct, and determining its degree of social danger. The legislator points out that social danger is determined by the social values it harms, as well as the danger of active subject to society and its attitude towards the illicit action or inaction. In these terms, contravention is located immediately after crime, but at the same time it is situated above the administrative and disciplinary misconduct.

Establishing the degree of social danger of contraventions is very important for both, the legislator and the state authority empowered to apply the sanctions. In order to find it out, the deed is subjected to an evaluation in terms of the constitutive elements and

the circumstances in which it was committed: action or inaction, consequences, object, subject, guilt, the time and place of commission, the manner and means used, etc. Judging by these elements, the legislator generally qualifies these deeds as crimes or contraventions. In turn, the official within the state authority empowered to solve the contravention cases will use the same criteria for detecting the degree of social danger in order to ensure an individualization of the liability and to establish an appropriate sanction to the contravener.

Another representative feature of contravention is the guilt. The mere regulation of the socially dangerous act in the contravention law is not enough to qualify it as a contravention. Such a qualification can be given only to the deed that was committed with guilt. Both, the social-dangerous action and inaction provided by law must be a conscious and volitional manifestation of the person. According to art. 14 CC, the individuals can be held liable only for the contraventions committed with guilt. As an act contrary to the rule of law, contravention is the social manifestation of human behavior, which means a human action executed under the control of will and reason. The contravener had the possibility to choose between obeying the law and breaking the social and legal order, that's why the existence of this freedom of choice underlines the guilt of the subject who commits the contravention.

The applicative value of contravention liability consists in ensuring the efficiency of legal norms, stimulating the attitude of respect for the law, establishing and maintaining social and legal order. In fact, all human actions are prone to generate a form of liability, because the rules of human behavior are regulatory requirements by which society defends its general interest. These rules also set the limits of the state intervention through coercive measures in cases of violation of this general interest.

In this regard, the contravention law achieves its purpose only through establishing the appropriate sanctions for the contraventions that are committed. These are meant to protect the personality, the rights and legitimate interests of individuals and legal entities, property, public, social and legal order. Moreover, among the main functions of the contravention liability are the detection and prevention of contraventions, removing their consequences and restoring the damaged social order, as well as educating the citizens in the spirit of respect for the law.

The multitude and frequency of contraventions committed annually on the territory of the Republic of Moldova determine the need for the intervention of the competent state authorities with measures of coercion, which are meant to ensure the re-education and correction of the contraveners. The contravention law, in general, and the contravention liability, in particular, has the extended mission of preventing socially dangerous acts committed by individuals. In order to avoid the transition to more serious violations of law, such as crimes, the state must focus on preventing contraventions, discouraging the contravener from becoming a potential criminal.

Prevention must be a continuous social process that supposes the application of social, cultural, economic, political, administrative and legal measures intended to prevent the antisocial deeds by identification, neutralization and elimination of the causes and factors favoring the contravention phenomenon. The sanctions applied for the

commission of contraventions must provide a negative example for the whole society, in order to raise the general awareness that each violation of the law will be followed by a measure of state coercion.

In addition, analyzing the comparative evolution of crimes and contraventions, the quantitative indicators show the indisputable predominance of contraventions in relation to the number of crimes that are committed annually. Consequently, judging by the fact that contraventions are committed more frequently, the competent state authorities have to concentrate to prevent and stop this phenomenon in order to exert, at an early stage, a positive influence on the behavior and the conscience of the individuals that are prone to breaking the law, obstructing their “advancement” to the area of criminal law.

The subject of contravention, as the person who conceived and committed the socially dangerous deed, is a compulsory element for the existence of contravention. The importance and necessity of its analysis is determined by the impact it has on the determination of the illegal deed within the activity of prevention, establishing and sanctioning of contraventions, which is meant to combat this phenomenon.

The notion of “*subjects of contravention*” reveals the persons involved in committing the contravention, either as active subjects (those who commit the contravention – contraveners), or as passive subjects (those who are subjected to the contravention – victims). Thus, as subjects of contravention appear the individuals who did not honor their obligation within the contravention legal relation of compliance and committed the prohibited deed, and the individuals or legal entities who are the beneficiaries of the protection guaranteed by the contravention norms, being the ones who bear the consequences of the contravention deed.

In the specialized doctrine we identify other points of view, which are less supported, regarding the division between the active and passive subject of contravention. According to these, the active subject of contravention is the one who establishes the contravention and applies the sanction, while the passive subject is the one who bears the punishment applied by the active subject (Cilibiu, 2020).

The legal framework of the Republic of Moldova does not provide the notion of “subject of contravention”, nor the pair notions of “active subject” and “passive subject”. Instead, the law uses the notions of: “liability of an individual for a contravention” (art. 16 CC), “liability of a legal entity for a contravention” (art. 17 CC), “victim” (art. 387 CC), “the person against whom a proceeding for a contravention is started” (art. 384 CC). In our interpretation, the notions of “active subject” and “passive subject” of contravention are component parts of the generic notion used in our analysis – “the subject of contravention”, which covers all the categories mentioned above.

The quality of *subject of contravention* must not be identified with that of *subject of law*, who are both the holders of the rights and obligations arising directly from the law, and the holders of the rights and obligations resulting from legal relations or from the commission of legal facts. The subject of contravention can be only a subject of law, but not all subjects of law are also subjects of contravention. Such a quality is acquired only by those who commit illicit deeds, meaning the individual or legal entity against

whom the state coercion is exercised by applying legal sanctions. The subject of the contravention law includes all the persons involved in the contravention legal relations, respectively the active and passive subjects of the contravention legal relations of compliance and conflict.

Any person can be involved in committing a contravention, except that not all the people are liable for a contravention, but only those who embody certain requirements of the law.

To be an active subject, the person must fulfill the general conditions required for any contravener, and some special conditions in case of certain contraventions.

Thus, basing on art. 16 al. (1) and (2) of the Contravention Code of the Republic of Moldova (hereinafter CC), “An individual with legal capacity who is 18 years old upon the commission of a contravention can be subject to liability for it. An individual aged between 16 and 18 years old can be subject to liability for committing the acts stipulated in art. 69 al. (1), art. 78, 85, 87, art. 88 al. (1), art. 89, art. 91 al. (1), art. 104, 105, 203, art. 204 al. (1), (2) and (3), art. 228–245, 336, 342, 352–357, 363, 365, art. 366 al. (1), art. 367, 368, 370, art. 372 al. (2)” (The Contravention Code of the Republic of Moldova, 2008).

From the provisions of the current legal regulation in the matter of contravention, we identify the compulsory conditions for the individual – subject of contravention:

An individual. It is important to mention that the contravention liability belongs to any individual who committed a contravention on the territory of our country, regardless of whether he is a citizen of the Republic of Moldova, a foreign citizen or a stateless person. Exceptions to this rule are the diplomatic representatives of foreign states or other persons who, in accordance with the international treaties to which the Republic of Moldova is a party or in accordance with the laws of the Republic of Moldova, do not fall under the jurisdiction of the Republic of Moldova or are simply removed from contravention liability.

The established age. The individual will be liable for a contravention only if he has reached the age of 18 years old, with the exceptions provided in art. 16 CC. This condition is required because the man acquires at a certain age the psychic faculties to realize his actions and to be able to execute and manage them consciously.

According to some opinions in doctrine, the possibility of reducing the age limit from which to presume the psycho-intellectual and volitional capacity of the person to direct in a certain way, legally or illegally, his own deeds should be examined (Preda, 2006). The limit established by law (18 years old) must be correlated with the evolution of social life and especially with the “contravention casuistry, which demonstrates that the whole complex of educational-informative problems of understanding the moral and legal norms regarding the individual and social behavior currently presents other coordinates” (Poenaru, 2002).

Regarding the appropriate age to engage the contravention liability, the idea of reducing it to 12 years old was launched at the level of several European states, a proposal under the strong impression created at social level by various deeds committed by authors at

alarmingly young ages (Poenaru, 2002: 46). In Romania, for example, the individual is liable for a contravention from the age of 16 years old, in Spain - from the age of 18 years old, being partially liable for certain deeds from the age of 14 years old, etc. In 1998, the Office of Juvenile Justice and Juvenile Delinquency Prevention performed a study about the so-called “very young offenders and contraveners”, and the conclusion reached was that, during the last years, most illicit acts had been committed by minors at a very young age, so that those aged between 7 and 12 years old could be also labeled as juvenile delinquents (Poenaru, 2002: 46).

In case of committing a contravention by a minor, the materials are sent inclusively to the local public administration, and at the same time the court may impose coercive measures of an educational character (for example, warning, placing juveniles under the strict supervision of parents, persons replacing parents or specialized state bodies, requiring juveniles to repair the damage caused, requiring to follow a course of psychological rehabilitation, a course of compulsory education, to participate in a probationary program). These measures can be applied only until reaching the age of 18 years old.

Responsibility. Art. 17¹ defines responsibility as “the psychological state of a person who has the capacity to acknowledge the prejudicial nature of the act as well as the capacity to express his own will and to control his own actions. Responsibility is a normal state of a man who has reached a certain age” (The Contravention Code of the Republic of Moldova, 2008).

Responsibility, as a mandatory condition of the active subject of contravention, cannot be confused with legal responsibility or legal liability. Therefore, responsibility is a psychological category regarding the psychophysical capacity of a man to realize the meaning, while legal responsibility and legal liability are legal categories (Hotcă, 2003).

If the contravener has no responsibility, he cannot be subject of contravention. In state of irresponsibility is the person who commits a prejudicial act being unable to understand or control his actions because of a chronic mental disease, a temporary mental disorder, a mental alienation or some other pathological mental conditions. A person who committed an act in state of responsibility is not liable for a contravention if he got a mental disease until the pronouncement of the sanctioning decision, being deprived of the possibility to realize and control his own actions (art. 27¹ al. (1) and (2) CC) (The Contravention Code of the Republic of Moldova, 2008).

Bringing into discussion this issue in the field of criminal law, we have to agree with the autochthonous researcher Sorin Timofei, “responsibility is presumed by the legislator as a normal state for any person who has reached the minimum age of criminal liability. However, this presumption has a relative character and it can be overturned by evidence to the contrary: when the contravener could not realize his actions or inactions or could not control them (in case of irresponsibility), or when the contravener could not fully realize the character and legality of his deeds or he could not fully control them (in case of reduced responsibility)” (Timofei, 2011).

Freedom of will and action. This supposes the possibility of the person to act and decide on the commission of a contravention deed, without an external constraint. Freedom of action means the possibility of the person to act according to his will, without any

physical or moral (mental) constraint. Constraint is a form of coercion and consists in forcing a person to do a certain thing that he would not do on his own initiative. Therefore, the person who commits a contravention, being forced by another person, cannot be found guilty because he did not freely dispose of his will, but acted under the pressure of an external factor. The illicit act committed as a result of coercion is not a contravention because it lacks a defining element, the guilt. The illicit act having a contravention character cannot be followed by the contravention liability of the perpetrator. The legislator establishes in art. 23 CC al. (1) and (2) that, “An act provided by this Code that was committed due to physical coercion on a person who could not resist it and that could not be otherwise eliminated shall not constitute a contravention. An act provided by this Code that was committed due to mental coercion exercised through a threat of imminent danger for oneself or for another person that could not be otherwise eliminated shall not constitute a contravention” (The Contravention Code of the Republic of Moldova, 2008). So, physical or mental coercion is considered to be one of the causes eliminating the contravention character of an act.

The legal status of the active subject of contravention is provided in art. 384 CC, and of the passive subject in art. 387 CC.

Sometimes, in order to be the subject of contravention, an individual must have a certain quality, such as that of civil servant, holder of a special right (driver’s license), etc.

The contravention law (art. 19 al. (6) and (7) CC) stipulates that a responsible person (a person who is granted permanently or temporarily by law, by appointment or by virtue of a task certain rights and obligations in view of exercising the functions of a public authority, of an administrative nature, organizational or economic actions in a company, institution, state organization, central or local public authority) shall be liable for accountability for committing a contravention stipulated by this Code if he:

- a) intentionally used his authority contrary to his work duties;
- b) clearly exceeded the rights and powers granted by law;
- c) failed to fulfill or unduly fulfilled his work duties.

In the absence of these conditions, a responsible person who is guilty of a contravention shall be held accountable in accordance with the general provisions.

For the commission of certain categories of contraventions, the legislation establishes, as a rule, a sanction for general subjects and another sanction for special subjects (for example, art. 313³ CC al. (2), “The request to hold and/or issuing a permissive act that is not included in the Nomenclature of Permissive Acts, establishing and/or imposing a payment for issuing a permissive act in a greater amount than the payment provided by the Nomenclature of Permissive Acts, unjustified refusal to issue the permissive act, invoking and applying certain requirements and procedures for issuing permissive acts that do not correspond to the law, as well as unjustified withdrawal of the permissive act shall be sanctioned by a fine of 60 to 90 conventional units for individuals, a fine of 90 to 120 conventional units for responsible persons, with or without the deprivation of the right to carry out certain activities for a period of 3 months to 1 year” (The Contravention Code of the Republic of Moldova, 2008).

In the doctrine of the contravention law we also meet the notion of *passive subject* of contravention, which means the individual or legal entity holding the social values harmed by the contravention. The passive subject of contravention has not to fulfill as many general and special conditions as the active subject.

In principle, the passive subject of contravention can be any individual regardless of age, even the irresponsible person, but we have to mention that a passive subject can be only a living person. In order to be a passive subject of contravention, the individual must be the holder of the social value protected by the contravention law (for example, the passive subject in art. 310¹ CC is the retired, the employee). It should be noted that the notion of passive subject is not recognized and supported by all the specialists in the field of law.

Judging by the criterion of holding the social value protected by law, we can make a distinction between the *main* passive subject and the *secondary* passive subject.

The main passive subject is the state, as the principal holder of the social value protected by law, respectively the right to do justice, which is threatened in its normal realization, and *the secondary passive subject* is the person who bears the material consequence or the state of danger created by the illicit act.

A contravention can be committed not only by one person, but also by a *group of persons*. The national legislation uses this notion in art. 43 CC as an aggravating circumstance, and at the same time, in some contravention components the actions of a group of persons are expressly provided (for example, art. 241¹ CC al. (2), “The actions specified in al. (1) committed by a group of persons or committed repeatedly during the same calendar year by a person who has already been sanctioned for this contravention or who generated the risk of a traffic accident...”).

It is important to emphasize that, due to the reduced social danger of contraventions, the instigators and accomplices are not liable for committing them and cannot be sanctioned. In this way, only the co-authors are considered to be participants.

At the same time, the contravention law provides in art. 44 CC the “plurality of contraventions” (The Contravention Code of the Republic of Moldova, 2008). If the same person commits two or more contraventions, a sanction shall be imposed for each contravention in part. If a person is declared guilty by the court of committing two or more contraventions, a sanction shall be imposed for each contravention in part, and the final sanction will be a cumulation of contraventions by absorbing the milder sanction by the more severe one or by cumulating the imposed sanctions within the limits of the article providing the more severe sanction.

Making a synthesis after the examination of the aspects related to the investigated problem, we conclude that the individual becomes subject of contravention only if he commits the illicit act that is qualified by law as a contravention and fulfills the general qualities provided by law. Also, in certain cases, in addition to the general qualities, the person must also possess the special qualities required by the norm from the Special Part of the Contravention Code, in which the liability for that contravention is established. Due to this fact, the individual becomes liable for the committed contravention.

In the end, contraventions are the most common antisocial deeds that break the rule of law and have a harmful effect on the social and legal order. For this reason, the competent authorities of the state have to focus on preventing this phenomenon and influencing in a positive way the behavior and the conscience of the individuals susceptible to break the law, obstructing their “advancement” from contraveners to criminals.

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References

- The Contravention Code of the Republic of Moldova from 24.10.2008. In: Official Monitor no. 3-6/15 of 16.01.2009, republished in the Official Monitor No. 78-84 of 17.03.2017.
- Cilibiu, O.-M. (2020). Subjects of administrative-contravention liability. *Annals of the “Constantin Brâncuși” University from Târgu Jiu. Legal Sciences Series.* (1), 53-62.
- Gutuleac, V. (2009). *Tratat de drept contravențional.* ULIM, Tipografia Centrala, Chisinau.
- Hotcă, M. A. (2003). *Drept contravențional: partea generală.* Editas., Bucuresti.
- Mihăilescu, M. E. (2013). *Sanctiunile contravenționale (Aspecte de drept material în dreptul românesc și comparat).* Hamangiu, Bucuresti.
- Pantea, O., & Antoci, A. (2020). *Drept contravențional.* Centrul editorial-poligrafic al USM, Chisinau.
- Poenaru, I. (2002). *Regimul juridic al contravențiilor.* Lumina Lex, București.
- Preda, M. (2006). *Drept administrativ: partea generală.* Ediția a patra, Lumina Lex, Bucuresti.
- Timofei, S. (2011) *Răspunderea penală pentru infracțiunile în domeniul concurenței.* Centrul editorial-poligrafic al USM, Chisinau.

SUSTAINING SEASONAL MIGRATION: STRUGGLES OF BAKARWALS AMID THE COVID-19 PANDEMIC

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Abstract: *The novel coronavirus has disrupted the lives and livelihoods of many people around the world. This muddle has been experienced in India by people in line with existing vulnerabilities. 'Bakarwal', a pastoral nomadic tribe residing in the Union Territory of Jammu and Kashmir, India undergoes this equivalent dilemma. For them, the year 2020 becomes convoluted owing to the adversaries of the pandemic. COVID-19 induced lockdown becomes an obstruction for their seasonal migration and further experiences numerous uncertainties. Keeping into view these observations, the present study explores their socio-cultural and economic struggles before, during, and after their seasonal migration. A qualitative approach was employed. Telephone Interviews using an Interview schedule were conducted. Results indicated that 'Bakarwal' tribe have undergone unfamiliar conditions with the onset of the pandemic. Movement barriers, seasonal animal diseases, the stigma of being carriers of the virus, psychological pressure, inadequate basic amenities, and loss of annual trade were the major repercussions encountered by them.*

Keywords: *Bakarwal tribe, COVID-19, lockdown, seasonal migration, novel vulnerabilities*

1. Introduction

The novel coronavirus outbreak was declared as a global pandemic by World Health Organization (WHO) on March 11, 2020. As per WHO, 2020 many diseases, epidemics, and pandemics have emerged and created threats to human life and health

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throughout history. On December 31, 2020, various cases with mysterious low respiratory infections were detected in the Hubei province of Wuhan in China and were firstly reported by WHO Country Office in China (Cascella et al, 2020). The disease was infectious and started to a blowout at an alarming rate (WHO, 2020). Shortly, the symptoms of the virus become observable which made it easy for the health care workers in recognizing the cases. WHO developed a method for weekly examination to report the online sources of misinformation and spread confirmed material on health emergencies (Purnat et al., 2021). Governments all over the world have to put various restriction and prohibitions on their citizens except Antarctica (UNDP, 2020). According to United Nations Development Plan (UNDP), the pandemic results in noticeably more than just a health care crisis. It produced an exceptional socio-economic and political crisis all around the world. The International Labour Organization (ILO) also estimates that around 400 million jobs could be lost due to COVID-19.

In India, the loss of individual lives and the economy was also witnessed due to the pandemic (Janardhanan et al., 2020). On March 24, 2020, Prime Minister declared a nationwide lockdown for initial twenty-one days in the country. The restriction and prohibitions were expected to safeguard the citizens from the spread of this disease. Indian citizens responded positively in support of the nationwide lockdown (Barkur and Vibha, 2020), whereas other studies indicated the negative implications of the lockdown. The coronavirus-induced lockdown has harmfully impacted the primary, secondary as well as tertiary sectors of the economy (Nicola et al, 2020). This economic aftermath also interrupted the socio-cultural life of the people. According to Lancet (April, 2020), the instant lockdown by the Indian government has enlarged misery among vulnerable groups. It has adversely impacted the public wellbeing institutions including education, tourism, agriculture, food sector, livelihood as well as health. A report by ILO in May 2020 titled “COVID-19 and the World of Work: A Focus on Indigenous and Tribal Peoples” illustrated that owing to the coronavirus pandemic, vulnerabilities of tribal and indigenous communities intensified. The world around the tribals experienced numerous ramifications amid COVID-19 induced lockdown and restrictions. According to a recent assessment report by the Forest Rights Act (FRA) titled “Impact of COVID-19 Outbreak and Lockdown Measures on Tribal and Forest Dwellers”, the issues faced by nomadic and pastoral communities enlarged during the coronavirus pandemic. As per Power et al., 2020 the COVID-19 pandemic has created huge disruption among the socio-cultural traditions of tribal people. Tribal communities in India were also unable to safeguard themselves from the havoc of this virus. Its ramifications reached even the remotest of the tribal villages.

One of the very significant tribal groups in the Union Territory (UT) of Jammu and Kashmir (J & K), India, is the ‘Bakarwal’ tribe. It is the second-largest tribe in the UT after Gujjars. Both Gujjars and Bakarwals share the same history, ethnicity, culture, and language besides clan structure, sub-castes/castes, and another traditional lineage. Some of the tribesmen claimed that the Bakarwals form a separate identity. They believe that Gujjars are mainly identified as cow-keepers; buffalo-keepers besides they are associated with minor agriculture produce however Bakarwals are goatherds and shepherds’ community.

The total population of the Bakarwal tribe in the UT as per Census 2011 is 113,198. It constitutes 7.58 percent of the total tribal population in J&K. They are highly concentrated in the Jammu region followed by the Kashmir region. Poonch, Rajouri, Anantnag, Udhampur, Kupwara, and Srinagar are the highly populated districts with this tribal population. It is a pastoral nomadic tribal group possessing its distinct features and culture (Dwivedi, 2018). Pastoralists can be defined as “members of a caste or ethnic groups with a strong traditional association with livestock-keeping, where a substantial proportion of the group derives over 50 percent of household consumption from livestock products or their sale, and where over 90 percent of animal’s feed and fodder is from natural pasture or browse, and where households are responsible for the full cycle of livestock breeding” (Sharma, 2003). Pastoral Nomadism can be defined as “a mode of life dependent primarily upon herding of animals and involving regular movements to new pasture lands which, from the agriculturalist's point of view, are marginal resources” (Leshnik, 1972).

Bakarwals are predominantly found in the Pir Panjal Range of the Western Himalayan Region (Sofi, 2013). They received the status in the constitutional list during 1991 (Warikoo, 2000). Bakarwals keep large herds of goats ‘Bakri’ thus; they have been named as Bakarwals by local people (Ibid). Livestock farming is the only source of income for them (Rao & Dilnaz, 2021). This pastoral community migrates twice a year to their upper summer pastures from lower winter pastures in October and returns to their summer pastures in April against all odds (Rao, 2003). They migrate with their family members, cows, buffaloes, horses, mules, dogs, goats, and sheep. Their animals couldn’t endure the same climate throughout the year. Therefore, seasonal migration is the opted coping strategy by this tribal group. The pastures fulfill the fodder needs of their cattle (Florentina and Grazia, 2014). They migrate within the districts whereas some migrate to other districts. This bi-annual migration is very demanding. They experience numerous challenges during their migration (Kumar & Kumar, 1998; Sofi, 2013). Lack of transportation facilities, overcrowded roads, and harsh climatic conditions, shrinking of pasture lands, water and fodder shortage, and lack of educational facilities for the children, military unrest, inadequate medical facilities, and dysfunctional animal husbandry centres are some of the major hurdles in their bi-annual migration (Rahi, 2013 and Kheraj et al, 2017).

Considering the existing dilemmas of bi-annual seasonal migration and the present-day challenges imposed by COVID-19, Bakarwal tribe has experienced unfamiliar distresses. The purpose of this exploratory study is to discover the muddle experienced by the Bakarwal tribe owing to the coronavirus pandemic before, during, and after their bi-annual seasonal migration from April 2020 to November 2020. The experiences of Bakarwals with delayed seasonal migration before April 2020 have been examined. The misfortune encountered by the tribes during the delayed migration were also explored.

The economic repercussions experienced by Bakarwals during the downward migration in November 2020 were also included in the study. The specific objectives of this study are:

1. To explore the impact of delayed migration amid COVID-19 on the Bakarwal tribe.
2. To examine COVID-19 induced struggles among Bakarwals during and after seasonal migration.

2. Methodology

Research Design and Approach: The present study is exploratory, conducted using a purely qualitative approach. The challenges encountered by Bakarwals amid coronavirus pandemic and lockdown are an exploration of new dimensions for social work research. In the UT of Jammu and Kashmir, very few empirical studies have explored the issues of this nomadic pastoral group during the COVID-19 pandemic.

Locale and Sample of the study: The study has been conducted in the Jammu division of the UT of J&K, India. The respondents represented all ten districts of the Jammu region. In the UT they fall into the list of Scheduled Tribes since 1991. Lokur Committee, 1965 embraced features such as “Indications of primitive traits, Distinctive culture, Shyness of contact with the community at large, Geographical isolation, and Backwardness” for considering Scheduled Tribe (Panduranga and Honnurswamy, 2014; Xaxa Committee, 2014).

Sampling Technique: The snowball sampling technique has been used to reach the respondents. Many respondents were not ready for face-to-face interviews, whereas the lockdown sets other grounds for choosing snowball sampling. As the sample population was widely dispersed, the snowball sampling technique was most appropriate.

Mobile numbers for telephone interviews with ten respondents were firstly arranged by one of the researchers, continuously engaged in tribal activism and welfare. Out of ten, four of them (mobile numbers) were contactable and six were not contactable at that time. Hereafter, the researchers relied on the existing inter-district networking among the respondents to reach the remaining six respondents. Ten respondents (Eight men and two women) were interviewed in total. The age of the respondents ranged from 25 years to 70 years. All of them were engaged in the bi-annual seasonal migration from their childhood. Pastoralism was their major source of livelihood. Bakarwals who performed bi-annual seasonal migration in the year 2020 were selected.

Sources of Data Collection: The study was empirical, simultaneously; equal importance to secondary sources was also given. Empirical data was collected by administering an open-ended Interview Schedule. Secondary data from journal articles, books, and news portals were also used for validating the results. Published journal articles and books were considered to understand the COVID-19 induced repercussions. The literature provided the base to understand the culture of Bakarwals and for framing the study tool. News portals were considered to explore the documented issues during the lockdown and also to report the similarity of responses

and issues across different regions. These issues include their pre, during, and post-pandemic socio-cultural, economic and political issues.

Tool and Procedure of Data Collection: The interview schedule was finalized after pre-testing and disquisition among the researchers. The tool was pretested on three respondents and later finalized. Telephone interviews were conducted with people belonging to the Bakarwal tribe, as suitable during the pandemic and lockdown.

Ten telephone interviews were conducted during the return migration of Bakarwals in November 2020, other than the pre-testing. The interview duration ranged between 30 to 50 minutes. Data has been collected by one of the researchers in a mixture of 'Gojri' and 'Pahari' languages. The other two authors complemented the process of preparing the tool. The final draft was prepared by all the authors jointly.

Informed Consent to participate in the study was taken orally. The prior appointment was taken from them considering their time and availability. The aims and objectives of the study were made clear to the respondents in advance. Telephone interviews were recorded on the cell phone of one of the researchers after taking their (respondents) approval. These recordings were later deleted from the researcher's cell phone. 6/10 respondents were ready for the on-spot interview, whereas 4/10 of them gave another suited time. The respondents didn't experience any inconvenience, or harm during the interviews. Researchers considered the confidentiality of names as no names are revealed in the study results. Research ethics were suitably considered while documenting the narratives too.

The interviews started from taking the demographic profile of the respondents along with their pre-pandemic experiences with bi-annual seasonal migration. Keeping in view the study objectives, the researcher interviewed the respondents on different heads: "What were the pre-pandemic issues encountered by the tribes during seasonal migration?", "What is their understanding about COVID-19 disease?", "What were the consequences of delayed migration amid COVID-19?", "Did they ever experience a similar pandemic in the past?", "What were the challenges associated with migration during a pandemic?", "What were the socio-cultural, economic and political consequences of delayed migration on their tribe?".

Data Analysis: Firstly, from the handwritten interview notes the researchers transcribed the narratives into MS Excel. The process of transcription helped the researchers gain familiarity with the responses (Bailey, 2008). Next, different codes were created after timely and comprehensive reading. These codes were later converted into different categories as already done in the tool. These categories were centered on the issues that were given much prominence by the respondents following the heads and sub-heads of the study tool. Further, four themes were created out of these categories to create a broader picture of the research issue. This process was done with dissection among the study researchers. The themes were created as per the emerging issues experienced by the Bakarwals in different dimensions. These dimensions comprised of socio-cultural, economic and political impacts of COVID-19 lockdown. Starting with the repercussions owing to the delay in the seasonal migration, the first theme emerged. The second theme mentions the tribal name for COVID-19 and its similarity with past

diseases. The third theme examined the common struggles associated with migration during COVID-19 lockdown. Hence, the fourth theme discussed the livelihood repercussions during downward migration encountered by the tribes. Data collection and data analysis were done altogether as suitable in thematic analysis (Dawson, 2002). Spoken narratives (Narrative data) were chronologically quoted in the themes to reflect their pre, during, and post-pandemic experiences with seasonal migration. The interconnection between the individual experiences and social identity was majorly established. The similarity of findings with secondary sources was also mentioned.

Limitation of the study: The study could not conduct in the entire UT of Jammu and Kashmir due to the dearth of resources and lockdown situation across the region. The study results cannot be generalized in the Kashmir region or other tribal populations, as the study includes respondents from the Jammu region only.

3. Results and Discussions

The results of the study talk about the struggles of the Bakarwal tribe during the COVID-19 pandemic. It has been primarily divided into four themes. The first part describes the impact of delayed bi-annual seasonal migration on the Bakarwal Tribe. The second part mentions the ‘*Gojri*’ name given to COVID-19 by the tribal group. The third part refers to the struggles and challenges faced by Bakarwals during seasonal migration amid COVID-19 lockdown and restrictions. The fourth part discusses the livelihood repercussions of COVID-19 lockdown during the downward migration of the Bakarwal Tribe. These themes are explained as:

Delayed Migration: A curse for Bakarwals

The delayed seasonal migration emerged as a curse to the Bakarwal tribal group. They consider this migration as empowering owing to the availability of fresh fodder for their livestock. The unexpected delay in the seasonal migration due to COVID-19 was not appreciated by them. As per the majority of the respondents (9/10) *“Bi-annual seasonal migration is the sole source of existence to the Bakarwal tribe. Life without this migration cannot be imagined by us. We are practicing this migration for ages”*.

The respondents perform this kind of migration practice as a survival strategy (10/10). The performance of this seasonal migration is quite essential for the livestock they possess. Bakarwals perform this migration as per the changing season (climatic conditions) which is April for reaching high summer pastures and November when they return to lower winter pastures. It takes one and a half months (45 days) to reach high pastures and another one and a half months to return low lying pastures. Their stay at one seasonal pasture is around four months. They carry their daily essentials with them which include: rice, maize flour, pulses, warm clothes and blankets, and utensils. They collect firewood from the nearest places and women cook the meals. Along with sheep and goats they also take horses to carry load and dogs for protection. Each Bakarwal possesses around 50-150 goats and sheep.

The respondents (10/10) mentioned that the delayed migration due to the COVID-19 lockdown appeared as a curse to their community. Their livestock were not in the position to bear the summer heat and warmth while their stay at lower winter pastures (India Spend, 2020). Fodder shortage was another dilemma for them. Unavailability of fodder in the lower pastures was one concern whereas the sole option to purchase expensive fodder from local landlords was another.

One of the respondents grieved “*Kburak ki kami se musibat aa jaegi*” which means “*lack of fodder will bring disaster for their livestock*”. Whereas many of the respondents (8/10) stated that the delayed migration and the summer heat caused certain diseases to their herd. These diseases are commonly known as ‘*Mokbar*’ in Gojri and ‘Foot Rot’ and ‘Foot Scald’ in English. This disease caused further pressure upon these tribals as it is a seasonal disease and shifting from one pasture to another is the single option for its prevention.

Bakarwals get frightened due to the COVID-19 disease as well as to the restrictions. All the respondents (10/10) were quite familiar with the health implications of COVID-19. They felt more terrified due to the strict lockdown and its restrictions. One of the respondents said, “*Bimari ka ilaj toh doctor karta hai, par hame yeh samaj nhi aaya ki police aur army ka isme kya kaam hai*”. This means that “*we know that diseases can be cured by doctors, but in this disease what role do police and army have to play*”.

As per one of the respondents “*the pandemic situation seemed more like a war to us as we experience physical violence at some places*”.

Lack of authentic information sources caused these undesirable circumstances. Thus, the delay in seasonal migration caused huge psycho-socio stress among Bakarwal Tribes. It also leads to health issues among their livestock which remained uncured for a long time.

“Bhavaa”: A tribal name for the disease

When the respondents were enquired about their understanding of COVID-19, many of them (7/10) called it “*Bhavaa*”, in their dialect. They also resemble COVID-19 with similar past diseases. Bakarwals speak the ‘*Gojri*’ language and they have their literature (Rahi, 2021). They use *Gojri* words instead of many Hindi and English words. During the COVID-19 pandemic, Bakarwals used the term “*Bhavaa*” and “*Mahamaari*” for novel coronavirus disease. As per the respondents, “*Bhavaa*” means “*something which emerges so sudden with less information available for the illnesses*”. The respondents believed that the COVID-19 disease emerged unexpectedly and so suddenly. People and health care workers also have little information regarding this disease. They also called it “*Mahamaari*” in the translation of the word epidemic to the Hindi language.

When the respondents were enquired about their encounter with similar diseases or illnesses in the past, they said (6/10) that “*not us but our grandfathers have encountered a similar disease*”. As per the respondents, “*Kalataap*” or “*Kalabukbar*” (Black fever) was also

one of the similar diseases encountered by their grandfathers. They believe that COVID-19 is similar to Black fever. Both of them appear as flu at an initial time which later becomes incurable, further causing loss of life. Thus, most of the Bakarwal respondents believed Black Fever and COVID-19 to be similar in terms of symptoms, incurability, and mortality.

Struggles and Challenges during Migration amid COVID-19 lockdown and restrictions

The study also aimed to study the struggle and challenges experienced by this tribe amid COVID-19 lockdown. In this regard, they were asked about the challenges experienced by them in terms of access and utilization of transport, market, health care facilities, animal husbandry, settling of camps, and children's education. Bi-annual seasonal migration is an inseparable part of the Bakarwal tribal group. Life without this migration cannot be imagined by them. The majority of the respondents (10/10) believe that *"The main aim of this migration is to find adequate pastures for our livestock. This migration is solely for our livestock not for individual members. Both of us (livestock and tribe) are interdependent for survival"*.

When the respondents were enquired about the difficulties they faced during upward seasonal migration amid COVID-19, many of them (8/10) responded that:

"The seasonal migration of this particular year is the most arduous one. Generally, we face numerous challenges during our migration but due to COVID-19, our struggles doubled. On one side we have to migrate on foot with our cattle and on the other side we have to bear the COVID-19 induced restrictions".

As per the respondents, it becomes difficult for them to access the market during the COVID-19 lockdown (8/10). Bakarwals carry a few eatable items with them during their tough migration and purchase additional basic items from the market. Some of the respondents (5/10) said:

"Even when the shops were open it was very hard for us to access them. Shopkeepers don't let us come near the shops. At some places, the shopkeepers closed their shops during our arrival. We were suspected to spread the virus by giving the money, or by spitting at public places. We faced so much embarrassment and stigma during this migration". During the migration Bakarwals also faced difficulty in getting testing for COVID-19. Many of the respondents (7/10) also mentioned that:

"As per the governmental directives we have to show our COVID-19 negative report to the local authorities for moving forward with the caravan. At some places, it becomes difficult for us to stay in long queues for tests and to show our reports after every few kilometers. Our cattle run here and there while meeting (showing reports and other documents) with the officials. When our cattle enter the localities, people maltreat and verbally abuse us. They think that we deliberately send our cattle to spread COVID-19. It becomes very hard to gather the cattle again in one place. This was a very troublesome situation for us".

Another issue faced by this tribal group is the lack of transport facilities. Bakarwals during their migration use local transport for easy traveling of unfit elderly, children, and women. The majority of the respondents (9/10) mentioned that:

“Sometimes we use local transport or hire private trucks for unfit family members and livestock. Due to lockdown, we cannot access local transport. There was no scope to hire private trucks and vehicles too. Due to this, it took more time for us to reach our destination”.

Bakarwals also faced serious health and educational implications due to COVID-19 lockdown and restrictions. One of the respondents mentioned that:

“We were unable to access health care facilities for elderly and children. Our children remained without medicine for around one week”.

Many of the respondents (8/10) also mentioned that:

“During COVID-19 it becomes very tough for us to access animal husbandry centres. We cannot avail medicine and vaccines for our livestock that are already facing ill health”.

Another respondent mentioned that *“Veterinary services are already inaccessible to us due to tough topography at high reaches. The additional restrictions laid by lockdown made this approachability matter more burdened”.*

The livestock of the Bakarwal tribe was already sick. Due to ‘Mokbar’ (Foot Rot), their livestock required immediate health services from animal husbandry centres. Many of them revealed grievances about veterinary services in their area (Verma, Gandhi, and Dash, 2019). Owing to the difficulty in availing of the animal husbandry services, Bakarwals faced livestock health challenges during the lockdown.

Mobile School, one of the amenities for schooling Bakarwal children also remained imperceptible during the COVID-19 lockdown. The majority of the respondents (7/10) said:

“Our children are already deprived of educational facilities. Few mobile schools which were functioning before also remained closed owing to the disease. There was no alternative for our children to study”.

The education of Bakarwal children through Mobile Schools is argumentative. Due to COVID-19, the little scope left for Mobile Schools got destroyed. Few children going to formal day schools remained inaccessible to the alternatives of “Online Education” owing to the unavailability of android mobile phones and staying at no network places. Digital Divide already prevails in the UT of Jammu and Kashmir due to digital illiteracy, poverty, geographic inaccessibility, external threats, and inadequate infrastructure (Hajam, Singh, & Rather, 2021; Hassan & Mirza, 2021). These factors adjoined the educational vulnerabilities of the Bakarwal children with COVID-19 pandemic.

In the light of the above-mentioned narratives, it can be concluded that the Bakarwal tribe had gone through numerous challenges and struggles during COVID-19. These challenges includes testing of COVID-19, showing the test reports, access to market, transport facilities, health services, and veterinary services, and educational facilities.

Livelihood Repercussions of COVID-19 lockdown during downward migration

The pastoral economy depends on the seasonal availability of products. Likewise, the economic activities of Bakarwals also rely on seasonal needs and production. Livelihood Repercussions were one of the most undesirable consequences of the lockdown for the Bakarwal tribe. The loss in trade, economic insecurity, low product pricing were some of the most highlighted challenges by them. The downward migration in November is of great economic significance among Bakarwals. During this migration, they used to sell their products to the dealers and earn their living. The month of November is usually the time of rituals and marriages that embrace huge demand for mutton and meat. The Bakarwals used to sell their goat and sheep to the local traders. Along with this, they also vend the wool of their sheep at the local wool centres. During the COVID-19 lockdown, marketplaces almost remained closed. This situation placed the traditional livelihood of Bakarwals in increased desolation and insufficiency. As per almost all of the respondents (9/10):

“We used to sell our goat and sheep during this period. This year the market shutdown declined our annual income and destroyed our traditional livelihood systems”.

Another respondent said:

“This year due to COVID-19 we were obligate to sell the wool for Rs. 5/kg which is the lowest rate. We have no option rather than selling the wool at low prices as only a few traders were available”.

Some of the respondents (5/10) also mentioned that:

“Sometimes we give our horses and mules on rent at construction and tourist spots. This year due to lockdown everything was shut down. We endured the loss of income and burden of arranging extra feed for our cattle”.

Some of the other respondents (7/10) stated that:

“During winter the demand for mutton increase. Similarly, the local rituals, marriage, and festive gatherings bring more likelihood to sell our sheep and goat in good amounts. In the lockdown period, all these gatherings were strictly restricted. This reduced opportunities to our local trade and business”.

Thus, people from the Bakarwal tribe faced a huge loss of livelihood opportunities and trade due to the COVID-19 pandemic. The traditional livelihood that they sustained over a long period got unsettled and troubled due to uncertain situations. Almost all of the primary and secondary livelihood practices of Bakarwals got hampered in one way or another.

4. Conclusion

The struggles of the Bakarwal tribe during the seasonal migration worsened amid COVID-19 lockdown and restrictions. The pastoral lifestyle which is already challenging fuelled the socio-cultural and economic deterioration for this tribe. Their existing vulnerabilities added more to the struggles during the COVID-19 pandemic. The present paper explored the hidden and unmapped struggles of the Bakarwal tribe in UT. The four themes of the study findings describe the COVID-19 induced escalated struggles throughout seasonal migration during April 2020 to November 2020 period.

The vulnerabilities of seasonal migration doubled due to the pandemic. The pandemic brings novel vulnerabilities and challenges among the tribal group. The entire period from April 2020 (the delayed migration) till November 2020 (the downward migration) keeps on placing new repercussions on the Bakarwal tribe. The lockdown-induced restrictions negatively impacted the socio-cultural, psychological, and economic dimensions of their life. Their social ties with the local communities become impaired due to the labeling attached to them. Their cultural practice of bi-annual seasonal migration also got obstructed during the COVID-19 pandemic. The lockdown results in a loss in trade and income placing them in extreme poverty. Along with this, the COVID-19 pandemic also levered psychological tension, fear, and anxiety among them. The administrative unpreparedness, delay in approval for migration, and damage of delayed seasonal migration faltered their political faiths too. The support provided by tribal leaders and activists strengthened their community bond whereas the lack of support mechanisms from other groups weakened their political convictions. Similar findings have also indicative from other studies done with the Gujjar and Bakarwal tribes in different regions of Jammu and Kashmir (Kishore, 2020; Majeed, 2020).

Although the tribal group faced all these challenges, they remained optimistic and assertive to sustain their old age culture of bi-annual seasonal migration. As one of the respondents mentioned:

“Marta kya na karta” mean “one who is dying will do everything for its survival”. Likewise, the Bakarwal tribe took every potential step to sustain their old age practice of seasonal migration amid COVID-19 pandemic-induced lockdown and restrictions.

Authorship

All authors contributed equally.

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References

- Bailey, J. (2008). First steps in qualitative data analysis: transcribing. *Family Practice*, 25(2), 127-131.
- Barkur, G., & Vibha, G. B. K. (2020). Sentiment analysis of nationwide lockdown due to COVID 19 outbreak: Evidence from India. *Asian Journal of Psychiatry*, 51, 102089.
- Cascella, M., Rajnik, M., Cuomo, A., Dulebohn, S. C., & Di Napoli, R. (2020). Features, evaluation and treatment coronavirus (COVID-19). In *Statpearls [internet]*. StatPearls Publishing.
- Dawson, D. C. (2002). *A practical research methods*. How to Books limited.
- Florentina, R., & Grazia, M. (2014). A Community Fact Finding of Jammu and Kashmir, India. *Journal: Scholedge International Journal of Multidisciplinary & Allied Studies*, 1, 1-9.
- Hajam, M., Singh, D. M., & Rather, W. A. (2021). Digital Education In Jammu And Kashmir: Opportunities And Threats. *European Journal of Molecular & Clinical Medicine*, 7(7), 6412-6417.
- Hassan, M. M., & Mirza, T. (2021). The Digital Literacy in Teachers of the Schools of Rajouri (J&K)-India: Teachers Perspective. *International Journal of Education and Management Engineering*, 11(1), 28-40.
- Janardhanan, N., Ikeda, E., & Ikeda, M. (2020). (Rep.). Institute for Global Environmental Strategies. doi:10.2307/resrep24952
- Kishore, J., (2020). Impact of Corona Virus [Covid-19] on Himalayan Tribe: Gujjars of Udhampur District. *International Journal of Innovative Social Science & Humanities Research*, 07(03), 13-20.
- Kumar, A. N. I. L., & Kumar, N. A. R. E. S. H. (1998). Gujjar Bakerwal—the ecofriendly tribals of Jammu and Kashmir since centuries. *Bulletin of the Indian Institute of History of Medicine*, 28, 139-145.
- Lancet, T. (2020). India under COVID-19 lockdown. *Lancet*, 395(10233), 1315.
- Leshnik, L. S. (1972). Pastoral nomadism in the archaeology of India and Pakistan. *World Archaeology*, 4(2), 150-166.
- Lokur Committee. (1965). Report of the Advisory Committee on the Revision of the Lists of Scheduled Castes and Scheduled Tribes. *New Delhi, Government of India*.
- Majeed, B. I. (2020). “We belong to nature and nature belongs to us”: Ensuring transhumance during the Covid-19 pandemic. *Social Work with Groups*, 1-7.
- Manju, D. (2018). Social structure of Gujjar and Bakarwal of Jammu and Kashmir. *International Research Journal of Agricultural Economics and Statistics*, 9(1), 232-238.
- Nicola, M., Alsafi, Z., Sohrabi, C., Kerwan, A., Al-Jabir, A., Iosifidis, C., ... & Agha, R. (2020). The socio-economic implications of the coronavirus pandemic (COVID-19): A review. *International Journal of Surgery*, 78, 185.

- Panduranga, R., & Honnurswamy, N. (2014). Status of scheduled tribes in India. *International Journal of Social Science and Humanities Research*, 2(4), 245-252.
- Purnat, T. D., Vacca, P., Czerniak, C., Ball, S., Burzo, S., Zecchin, T., ... & Nguyen, T. (2021). Infodemic Signal Detection During the COVID-19 Pandemic: Development of a Methodology for Identifying Potential Information Voids in Online Conversations. *JMIR Infodemiology*, 1(1), e30971.
- Power, T., Wilson, D., Best, O., Brockie, T., Bourque Bearskin, L., Millender, E., & Lowe, J. (2020). COVID-19 and Indigenous Peoples: An imperative for action.
- Rahi, J. (2013). GUJJARS. *Nature*, 138(160).
- Rahi, J. Rafiq Anjum-Stalwart of Gojri literary movement. Available at URL: https://d1wqtxts1xzle7.cloudfront.net/62040960/Dr_Anjum_Rafiq20200209-58004-xhkjqo-with-cover-page-v2.pdf?Expires=1655916370&Signature=T0t-yiPBA9TpOJnhkiUbt60SvY7EcXKNmUcwYn42Ty~4Nqe0FDNvoRb9OHA BIItdDxGMefZszX~nQDu3Zm4v9xkDSfnD4ImNUhu4RuLMnMwY3hDtSf2d9ja3RIO5VL7FoTEakYj4mMKTKQXk-NMaMkjF~zIprB8KItAiVkkOR5oin~Zm~83MTJJM2tSm8KRb99yVJsn2ZYulsLU6EWnSJBGE~y4kUyG0MYDxTrAjFBjp6FcfjdNH1P5Z86QcBbo7k5IEYVLOW9kYbnOL3vDVkj2MHggokiNiryB7XDdbgZix58EDdkjbnv~0Ch6gkqIO8cxIys5xjYIKqCHh72Xn75Q__&Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA, accessed June 1st, 2022.
- Rao, A., & Casimir, M. J. (2003). *Nomadism in South Asia*. Oxford University Press.
- Rao, P. D. (2021). Bakarwals Of Kashmir: An Observation. *Psychology and Education Journal*, 58(2), 11491-11495.
- “Scheduled Tribe Order” (PDF). Government of India, Tribal Affairs Department
- Sharma, V. P., Rollefson, I. K., & Morton, J. (2003). Pastoralism in India: a scoping study. *Indian Institute of Management and League of Pastoral Peoples, Ahmedabad, India*.
- Sharma, R. COVID-19 PANDEMIC AND BAKARWAL PASTORALISTS ISSUES.
- Sofi, U. J. (2013). The sedentarization process of the transhumant Bakarwal tribals of the Jammu & Kashmir (India). *IOSR JHSS*, 11, 63-67.
- Verma, V. R., Gandhi, S., & Dash, U. (2019). Traversing the margins: Access to healthcare by Bakarwals in remote and conflict-prone Himalayan regions of Jammu and Kashmir. *Pastoralism*, 9(1), 1-16.
- Warikoo, K. (2000). Tribal Gujjars of Jammu & Kashmir. *Himalayan and Central Asian Studies*, 4(1).
- World Health Organization. (2020). (Rep.). World Health Organization. doi:10.2307/resrep28113
- Xaxa Committee. (2014). Report of the High Level Committee on Socio-Economic, Health and Educational Status of Tribal Communities of India. *Ministry of Tribal Affairs, Government of India, New Delhi*.

Internet References

- [https://www.who.int/india/emergencies/coronavirus-disease-\(covid-19\)](https://www.who.int/india/emergencies/coronavirus-disease-(covid-19)) Accessed on 12-10-2020
- <https://www.newsclick.in/COVID-19-Jammu-Bakarwals-Nomadic-Community-Stuck-No-Masks-Coronavirus> Accessed on 12-10-2020

- <https://www.census2011.co.in/census/state/jammu+and+kashmir.html> accessed on 22-10-2020
- <https://www.indiaspend.com/lockdown-delayed-spring-migration-will-cost-jks-nomadic-pastoral-tribes/> accessed on 28-02-2021
- <https://www.newsclick.in/Jammu-Kashmir-Gujjars-Bakarwals-Unable-to-Sell-Produce-COVID-19> Accessed on 11-10-2020
- <https://www.thekashmirmonitor.net/how-bakarwals-kept-covid-19-at-bay-during-seasonal-migration-in-jk/> Accessed on 11-10-2020
- <https://www.undp.org/content/undp/en/home/coronavirus.html> accessed on 23-10-2020
- https://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/documents/publication/wcms_746893.pdf accessed on 23-20-2020
- <https://www.fra.org.in/document/COVID-19%20Assessment%20Report.pdf> accessed on 24-10-2020
- https://www.academia.edu/40780958/Seasonal_migration_of_Gujjar_and_Bakarwal_in_Poonch_district_of_Jammu_and_Kashmir accessed on 24-10-2020
- https://censusindia.gov.in/Tables_Published/SCST/dh_st_jk.pdf accessed on 24-10-2020

A LOGISTIC REGRESSION ANALYSIS OF DETERMINANTS OF CHILD MALNUTRITION IN UTTAR PRADESH, INDIA

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Abstract: *This paper examines the effects of socio-economic determinants on child malnutrition in Uttar Pradesh- the most populous and malnourished state of India. Using data from NFHS-4, this study highlights district-wide variations in nutritional status of children less than five years in the state. The percentage of stunted, wasted, and underweight have been taken as dependent variables, while main explanatory variables of child malnutrition were female education, maternal malnutrition (BMI), breastfeeding practices, children's place of residence, father's education, wealth index of household, family planning, sex of the child, sex of the household and age cohort of mother. Logistic regression models have been applied in order to observe the association between explanatory variables and malnutrition. The findings revealed a high incidence of less stunted, wasted, and underweight infants in case of an educated parents, particularly educational level of mother. Wealth index representing the possession of assets by the household found to be an important indicator in the sense that children born to households with richer and richest quintiles showing better-nourished children aged under-5. The modern method of using contraceptive, breastfeeding practices, maternal malnutrition were also important indicators influencing the rate of malnutrition in children. The study suggested that imparting education to females, breastfeeding practices, economic status, and contraceptive use can play an important role in reducing nutritional status of children.*

Keywords: *malnutrition, stunted, wealth index, education, contraceptive use.*

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1. Introduction

Malnutrition, defined as deficiency or imbalances in a person's nutrients intake, is considered a sensitive indicator and most common nutritional disorder for any developing nation. The high prevalence of child malnutrition reflects not only a country's past health status but also its future health trails (Subramanyam et al., 2010). Addressing the problem of malnutrition, the sustainable development goals (SDG) adopted by United Nations (2019) indicates '*By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women, and older persons*' under Goal 2.

In this context, monitoring child malnutrition is crucial for planners and policy makers in a country like India, a country which is facing the high prevalence of child malnutrition, accounting for one third of the world's wasted (height-for-age). UNICEF contends that in India, the percentage of underweight and stunted children less than five years were 43 percent and 48 percent respectively because of enduring undernutrition. It is estimated that worldwide, India executes poorly in child malnutrition status and ranked 114 out of 132 countries, just prior to Afghanistan and Pakistan (IFPRI, 2016) and in the early 2000s, it was around one-third of all malnourished children in the world (Svedberg, 2008).

Several studies indicated that child malnutrition affected child morbidity, health-care expenditure and economic progress of any country (Measham & Chatterjee, 1999; Mishra, Lahiri & Luther, 1999) which further increase the risk of child ailment, retardation in mental and physical growth, resulting into low ability to work, loss of output and efficiency, high burden of health care expenditures and lastly can pledge the poverty trap (World Bank, 2006; Grantham et al., 2007; Tarozzi & Mahajan, 2007; Walker et al., 2007). Also. It is considered that severe or chronic malnutrition increase the educational attainment and outcome of the children (Ahmed et al., 2012). International Food Policy Research Institute (IFPRI) reports that in developing countries, one out of every three children under-five, is malnourished. It is clearly noted that the high prevalence of malnutrition not only cause severe cognitive and physical loss of children but also it is a collapse or exploitation of a child's human right (Das & Sahoo, 2011).

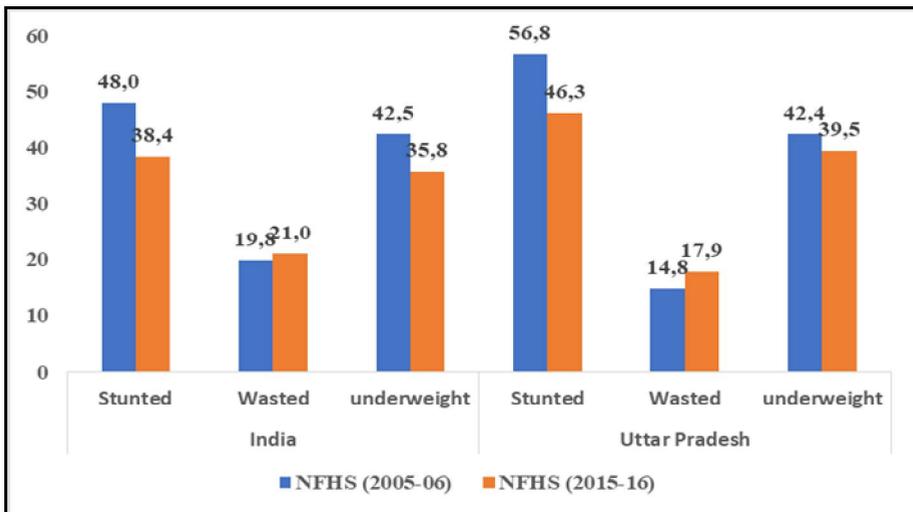
The population of Uttar Pradesh is 199.5 million (India's most populated state) and 39 percent of the total child population of India resides in the state. According to the report published by UP State Nutrition Mission, in this state, half of all children age-5 are stunted, and 10 percent were wasted in 2014. In Uttar Pradesh, infant mortality rate (IMR) and malnutrition rate are the highest in the country. National Family Health Survey-4 (NFHS) data revealed that in Uttar Pradesh, the percentage of malnourished children has declined significantly in the last ten years. In 2005-06, 56.8 percent of children under-5 years of age were stunted, and 42.4 percent were underweighted; these figures fell to 46.3 percent and 39.5 percent respectively, in 2015-16 (figure 1).

As per the report published by National Sample Survey Office (NSSO), the percentage of poor in the state is 30.4 percent higher than all India (25.7%) poor. IMR is 48 per

thousand live births, the under-5 mortality rate is 73 per thousand live births, and life expectancy is 62.9 years for male and 65.4 years for female. However, the mortality rate among the children under-5 years of age fell by 18 percent from 2005-06 to 2015-16, and IMR fell by 9 percent during the same period. Improvement in child nutrition during the inter-survey period is the result of interventions such as broader coverage of midday meals to children at school and rigorous operation of Integrated Child Development Scheme (ICDS) at a more disaggregated level, underpinning of health outreach facilities to rural and poor ménages for on-time vaccination of children and strengthening of the public distribution system (PDS) of providing food grains at promoted prices to the weaker section.

However, undernutrition of children remains a major health problem at the disaggregated level in India. There has been a remarkable difference in IMR across the districts; for example, highest in Shrawasti (96) while lowest in Kanpur Dehat (37). In Uttar Pradesh, a considerable variation has been observed between rural and urban in terms of child malnutrition. In rural areas of Uttar Pradesh, prevalence of stunted and underweight among children was 48.5 percent and 41 percent respectively, as compared with 37.9 percent and 33.7 percent among urban children. In this framework, a study of child malnutrition and its important determinants is required for policy implications and therefore, the present study examined the effects of various socio-economic factors on child malnutrition children less than five years in Uttar Pradesh, employing the data from NFHS-4 (2015-16).

Figure 1: Malnutrition trends in India and Uttar Pradesh children among aged 0-5 years



2. Previous research

There are several socio-economic and demographic factors (place of residence, age, and nutritional status; and maternal education) responsible for poor nutritional status of children (Bangladesh Demographic and Health Survey, 2007). The benefits of mother's education and its impact on child health status is well documented in literature which lowers the rate of child malnutrition, in other words, the prevalence of malnutrition is lower in case of educated mother (Frost, Forste & Hass, 2005; Basu & Stephenson, 2005; Miller & Rodgers, 2009; Cleland, 2010; Bbaale, 2014; Burroway, 2016). A study by Mosle & Chen (1985) reported that effect of mother's education on children's nutritional status works through a set of 'proximate determinants', such as, fertility factors, environmental amenities, breastfeeding practices, and utilization of childcare services. Similarly, a host of studies contend that more educated mothers may have more nourished children because they have better knowledge about child rearing practices and health care and utilization (Thomas et al., 1991; Desai & Alva, 1998; Glewwe 1999; Currie & Moretti, 2003).

A substantial range of literature in the domain of health and education have discussed the casual relationship between mother's education and nutritional status of children and given some possible trails to find the link. The important studies include: (1) more educated mothers can take better care of their children about nutrition and health care, for example, washing of clothes, feeding practices, treatment during sickness and availing timely vaccination services etc. (Caldwell 1979; Mondal et al., 2009) and better sanitation such as flushing toilets and running water (Horton, 1998; Case, 2001, Choudhury, 2015) (2) An educated mother can make healthier choices for themselves during pregnancy that effectively prevent fatal childhood diseases (Govindasamy & Ramesh, 1997) and directly affected the health of the child at birth (Miller & Rodgers, 2009); (3) Educated mother can give better level of living as previous research documented that education provides women ample opportunities to work outside the home and earn an income which empower them through greater authority and bargaining capability in the family (Nussbaum, 2004; Sen, 1999).

However, a growing body of literature has drawn attention towards the impact of father's education in improving child nutritional status (Case et al., 2002). It is well-established fact now that educational level of father plays a crucial role in family's financial status which in turn ensures better access to child health facilities and further better child nutritional status (Choudhury, 2015). India's NFHS data also revealed a very high percentage of maternal malnutrition which shows the worse-off condition of women. Studies claimed that mother's nutritional status had a positive association with child nutritional status (Sethuraman, 2006).

Poor breast-feeding practices in early childhood contribute to the burden of malnutrition and infant and child mortality (Patel et al., 2010). It is observed that working mothers have limited time for breastfeeding and to manage other nutritional and health services to their children. Working mothers are dependent on a caretaker for their child and caretaker's poor attention, affection and involvement in child feeding are the major causes for undernutrition of children. Moreover, a large body of empirical research claimed that caretakers might not make the best use of offered resources due

to less information of optimal feeding behaviours and inappropriate cultural beliefs and practice about nourishing (Allen and Gillespie, 2001; Moore, Akhter and Aboud, 2006).

Also, location or place of residence is one of the socioeconomic covariates often used in the literature which determines child malnutrition across the region (Sastri, 1997). A growing body of literature demonstrated that wealth status of a family has a significant and positive impact on nutritional status of children (Smith & Haddad, 2000; Haddad et al., 2003; Heltberg, 2009; Headey, 2013). A variety of indicators has been used to measure economic status of the household, however, sorting of households according to income level is more relevant proxy. While many studies claimed that malnutrition is associated with poverty and disease (Dasgupta et. al., 2005) and argued that due to poor access of food a large segment of children is suffering from severe health problems and morbidity.

To improve child nutritional status, Government of India has introduced major nutrition supplementation programs such as Integrated Child Development Services (ICDS) and Mid-day Meal (MDM) Programme at the disaggregated level. However, little is known about the empirical findings of the factors that drive child malnutrition, especially in poor and bigger states like Uttar Pradesh. In this connection, in order to formulate appropriate strategies related to child health outcomes, policy makers and planners must prerequisite familiarity of the factors responsible for poor child outcome such as stunting, wasting and underweight.

Therefore, the main objectives of this paper are to understand nutritional status based on stunted, wasted and underweight of children less than the age of five and to examine the factors which influence child malnutrition in respect of certain socio-economic variables, for instance, father's education, place of residence, wealth status, family planning, sex of the child, sex of the household, religion; and maternal indicators like mother's malnutrition (BMI) and age cohort of mother. This study examined the various socio-economic and household factors which are responsible for child malnutrition in Uttar Pradesh.

3. Data and methods

In this study, data has been assessed from the NFHS-4 conducted by the International Institute of Population Sciences (IIPS), Mumbai in 2015-16 and constrained to children under the age of five. NFHS is a collaborative project of IIPS and many organizations including foreign institutions. IIPS was assigned as the nodal agency by the Ministry of Health and Family Welfare, Government of India and responsible for providing coordination and technical assistance for the NFHS-4¹³.

¹³ NFHS-4 is funded by the United States Agency for International Development (USAID), DFID, the Bill and Melinda Gates Foundation (BMGF), UNICEF, UNFPA, the MacArthur Foundation and the Ministry of Health and Family Welfare (MoHFW), Government of India.

The survey used a uniform questionnaire, two-stage sampling design with stratification by rural-urban background and field practice to make possible comparability of the data and to achieve enhanced data quality. For anthropometric analysis, malnutrition of children is enumerated in terms of anthropometrical measures- weight-for-age (stunted), height-for-age (wasted) and weight-for-height (underweight) and Z-score ≤ 2 standard deviation, World Health Organisation/National Centre for Health Statistics reference standards were applied to compute the standardized Z-score for all three measures (WHO, 1978; Mazumdar, 2010).

In this survey, data on children's height, weight and underweight have been collected less than 5 years. Mother's education, place of residence (rural-urban), sex of the child (boys-girls), sex of the household, father's education, wealth index (based on an ownership-of-goods index), family planning (use of contraceptive), mother's BMI, breastfeeding practices and mother's age cohort are the important indicators that are assumed to effect nutritional status of a child. The logistic regression analysis has been employed in the analysis for estimation of the odds of being malnourished in the children of Uttar Pradesh.

Dependent variable denotes the number of children whose z-scores are below -2 are coded 1 and those with z-scores of -2 or higher are coded 0. The details of explanatory variables have been given in table 1 and thus results obtained are compared with reference category. In order to compute variables, research design and sample weights, statistical tool is carried out using SPSS (20.0 version) software for window and the significance levels of $p < 0.01$, 0.05 and 0.10 were taken.

Table 1: Symbolization and definition of variables used in the logistic regression

Symbolization	Independent variables	Definition
Mother's education	Educational level of the mother (dummy variable)	
Mother_illit ^R	Mother is illiterate	=1, if mother is illiterate =0, otherwise
Mother_elemedn	Mother received elementary level of education	=1, if mother is having 1-8 years of schooling =0, otherwise
Mother_secעדn	Mother received secondary level of education	=1, if mother is having 9-10 years of schooling =0, otherwise
Mother_hiedn	Mother received senior secondary or above level of education	=1, if mother is having 11 or more years of schooling =0, otherwise
Sex_child	Sex of child (dummy variable)	
Child_boy ^R	Boy child	=1, if the child is boy =0, otherwise
Child_girl	Girl child	=1, if the child is girl =0, otherwise

Symbolization	Independent variables	Definition
Father's education	Educational level of the father (dummy variable)	
Father_illiterate ^R	Father is illiterate	=1, if father is illiterate =0, otherwise
Father_emedn	Father received elementary level of education	=1, if father is having 1-8 years of schooling =0, otherwise
Father_secedn	Father received secondary level of education	=1, if father is having 9-10 years of schooling =0, otherwise
Father_hiedn	Father received senior secondary or above level of education	=1, if father is having 11 or more years of schooling =0, otherwise
Sex_hhn	Sex of Household (Dummy variable)	
Male ^R	Male member	=1, if the sex of household is male =0, otherwise
Female	Female member	1, if the sex of household is female =0, otherwise
Place_residence	Place of residence (dummy variable)	
Urban ^R	Place of residence in urban areas	=1, if the location of household is urban =0, otherwise
Rural	Place of residence in rural areas	=1, if the location of household is rural =0, otherwise
Contraceptive_use	Use of contraceptive or family planning by household (dummy variable)	
Trad_method ^R	Household using traditional method	=1, if the household is using traditional method =0, otherwise
Mode_method	Household using modern method	=1, if the household is using modern method =0, otherwise
Others_method	Household using other method	=1, if the household is using other method excluding traditional and modern =0, otherwise
Wealth Index	Wealth index reflecting the ownership of some basic assets by the household (dummy variable)	
Poorest ^R	Household is belonging to the poorest income category	=1, if the household is belonging to the poorest category =0, otherwise
Poor	Household is poor	1, if the household is poor =0, otherwise

Symbolization	Independent variables	Definition
Middle	Household is belonging to the middle-income category	1, if the household is belonging to the middle-income category =0, otherwise
Richer	Household is belonging to the richer income category	1, if the household is belonging to the richer income category =0, otherwise
Richest	Household is belonging to the richest income category	1, if the household belonging to the richest income category =0, otherwise
<i>Body Mass Index (BMI) of mother</i>	BMI of the mother (dummy variable)	
BMI ≤ 18.5 kg/m ² R	Mother's BMI is BMI ≤ 18.5 kg/m ²	=1, if the mother's BMI is BMI ≤ 18.5 kg/m ² =0, otherwise
BMI ≥ 18.5 kg/m ²	Mother's BMI is BMI ≥ 18.5 kg/m ²	=1, if the mother's BMI is BMI ≥ 18.5 kg/m ² =0, otherwise
<i>Breastfeeding</i>	Breastfeeding practices by mother (dummy variable)	
Within 1 st hour ^R	Child received breastmilk within 1 st hour	=1, if child received breastmilk within 1 st hour =0, otherwise
More than 1 st hour	Child received breastmilk more than 1 st hour	=1, if child received breastmilk more than 1 st hour =0, otherwise
<i>Mother's Age Cohort</i>	Age of the mother (dummy variable)	
15-19 ^R	Mother is 15-20 years old	=1, if the mother is 15-20 years old =0, otherwise
20-24	Mother is 20-24 years old	=1, if the mother is 20-24 years old =0, otherwise
25-29	Mother is 25-29 years old	=1, if the mother is 25-29 years old =0, otherwise
30-34	Mother is 30-34 years old	=1, if the mother is 30-34 years old =0, otherwise
35-39	Mother is 35-39 years old	=1, if the mother is 35-39 years old =0, otherwise
40-44	Mother is 40-44 years old	=1, if the mother is 40-44 years old =0, otherwise
45-49	Mother is 45-49 years old	=1, if the mother is 45-49 years old =0, otherwise

4. Results and discussion

Table 2 clearly depicted that the percentage of underweight and stunted children increased up to one year for the boys and then decreased to about 4 years. The percentage of wasted children increased up to one year and then decreased up to 4 years for both, boys and girls. The data demonstrates that the percentage of underweight, stunted and wasted below the age of five was 39.7 percent, 46.5 percent and 19.2 percent, respectively for boys and it was 39.8 percent, 46.2 percent and 16.7 percent for girls. The data also revealed that the percentage of underweight was less in girls in comparison to boys, but it contrasts with the case of stunted and wasted.

District-wide variations in frequencies and ranks among the under-five children by sex were given in appendix (Table 1A). It is clearly noted that inter-district variation is high in terms of stunted, wasted and underweight in Uttar Pradesh. In terms of boys stunted, the top five poor performer districts were Gautam Buddha Nagar, Jhansi, Ballia, Meerut and Saharanpur. While all the bottom five performer districts where the prevalence of stunting was high were; Bahraich, Shrawasti, Balrampur, Gonda and Siddharth Nagar, located in the eastern region of Uttar Pradesh.

Despite being placed in the western region in the state, Gautam Buddha Nagar and Saharanpur, both have a high percentage of stunted children. In terms of boys wasted, Mahamaya Nagar, Etah, Farrukhabad, Gonda and Sant Kabir Nagar were the top five performers, while Hamirpur, Lucknow, Lalitpur, Kaushambi and Jalaun were the bottom five performers. The districts which fall under the top five performers in boys underweight include Mathura, Mahamaya Nagar, Gorakhpur, Gautam Buddha Nagar and Firozabad. In contrast, Budaun, Kaushambi, Chitrakoot, Jaunpur and Pilibhit were the bottom five performers.

In terms of girls stunted, Ghaziabad, Baghpat, Lucknow, Gautam Buddha Nagar and Rae Bareli were the top five performers while, Bahraich, Balrampur, Shrawasti, Siddharth Nagar and Maharajanj were the poor performers. In girls wasted category, Lalitpur, Chitrakoot, Rae Bareli, Lucknow and Hamirpur were the bottom five performers while, Mainpuri, Farrukhabad, Kanshiram Nagar, Gonda and Deoria were the top five performers. In terms of girls underweight, districts fall into the five top categories were Firozabad, Mathura, Ghaziabad, Ballia and Gautam Buddha Nagar while, Shahjahanpur, Jaunpur, Budaun, Jalaun and Sant Ravidas Nagar were the bottom five performers in the state.

Districts with a high prevalence of stunted for both the boys and girls were observed in Bahraich, Balrampur, Shrawasti, Siddharth Nagar while the low prevalence for both sexes was observed in Gautam Buddha Nagar. Likewise, in terms of wasted, the high prevalence for both sexes have been observed in some districts like Hamirpur, Lalitpur and Lucknow. In contrast, the low prevalence for boys and girls has been observed in Gonda. High prevalence of underweight for both boys and girls has been observed in Budaun. In contrast, low prevalence of underweight for both has been seen in the districts of Mathura, Forozabad and Gautam Buddha Nagar.

The percentage of stunted is higher in girls in comparison to boys in the districts like, Rampur, Shahjahanpur, Unnao, Jalaun, Fatehpur, Basti, Ballia, Chandauli and Etah.

Some districts in the state where the percentage of stunted was lower in girls in comparison to their boy's counterpart include Jyoptiba Phule Nagar, Firozabad, Pilibhit, Hardoi, Lalitpur, Faizabad, Ambedkar Nagar, Jaunpur, Ghazipur and Sonbhadra. No substantial differences between boys and girls were observed in case of wasting. Although, considerable variation between boys and girls were found in some districts such as Saharanpur, Mahamaya Nagar, Bareilly, Hamirpur, Fatehpur, Balrampur, Sant Kabir Nagar and Gorakhpur where the prevalence of underweight was higher in boys than girls. On the other hand, there were some districts where the percentage of underweight was higher in boys in comparison to girls include Mainpuri, Pilibhit, Kanpur Nagar, Kanpur Dehat, Barabanki, Sultanpur, Bahraich, Maharajganj and Jaunpur.

Table 2: Age and sex wise nutritional status of under- five children in Uttar Pradesh

Sex of child	Year	Stunted		Wasted		Underweight	
		N	%	N	%	N	%
Boy	0	914	24.9	1113	30.3	1185	32.3
	1	2032	53.2	826	21.6	1618	42.4
	2	1982	52.9	629	16.8	1573	42.0
	3	2046	52.5	588	15.1	1611	41.4
	4	1860	48.1	499	12.9	1557	40.3
	Total	8834	46.5	3655	19.2	7544	39.7
Girl	0	724	21.7	955	28.6	1032	30.9
	1	1659	48.1	642	18.6	1322	38.3
	2	1889	55.3	460	13.5	1467	43.0
	3	1970	54.0	415	11.4	1562	42.8
	4	1719	51.1	396	11.8	1468	43.6
	Total	7961	46.2	2868	16.7	6851	39.8

Source: Calculated from NFHS-4 data, Government of India.

Table 3 reveals the parameter estimates for stunting. Coefficient of covariates and the related standard error is shown in parentheses. Mother's level of education is an important factor in determining stunting of a child. It was found that mothers who received elementary (OD=1.598, SE=.129), secondary (OD=1.762, SE=.137) and higher (OD=1.442, SE=.117) level of education lower the rates of stunting. This finding is unfailing and supported by many studies such as Roy (2000); Smith & Hadded (2000); Headey (2013) and many others.

Likewise, father's education also has a significant influence on stunting. The result indicates that fathers who have completed elementary (OD=1.347, SE=.125) and secondary (OD=1.451, SE=.128) level of education condense the rate of stunting and it is statistically significant at 1 percent level of significance. Though, the result is not found to be statistically significant if father has above secondary or higher level of education.

However, household's location of children no longer affected the rate of stunting. The association between sex of household and stunting is negative and statistically

significant at 1 percent level of significance with low odd ratio. It confirms that if the of household is headed by female (OD=.760, SE=.082) it lowers the rate of stunting.

Another important and determining factor of stunting is wealth index. It demonstrates that children born to families with richer and richest wealth quintiles showing lower stunting children. It means if the economic condition of a family is better it can upsurge the level of living of the household, allow them to take indispensable care of the children and further reduce stunting of children.

Use of modern method of contraceptive is significant indicator which also lowers the rate of stunting. The results display that if family is using modern method (OD=1.291, SE=.255) of contraceptive, they reduce stunting.

The association between mother's BMI (OD=2.654, SE=.082) and stunting is robust and highly significant with high odd ratio. The result is statistically significant at 1 percent level of significance which indicates if mother's nutritional status is better, they can lower the rate of stunting.

Our logistic regression results indicate a significant and negative relationship between children belonging to the age up to 5 years who have never been breastfed within first hour of birth (OD=.876, SE=.063) and stunting. There is no significance association found between mother's age cohort and stunting.

Table 3: Determinants of stunting using multiple logistic regression results

Variable	B	Sig.	Odd ratio	95% C.I.
<i>Mother's Education</i>				
Mother_illit ^R				
Mother_emedn	.469 (.129)	.000	1.598	1.241-2.058
Mother_secedn	.567 (.137)	.000	1.762	1.347-2.306
Mother_hiedn	.366 (.117)	.002	1.442	1.147-1.814
<i>Sex of Child</i>				
Child_boy ^R				
Child_girl	.093 (.056)	.099	1.097	.983-1.225
<i>Sex of Household</i>				
Male ^R				
Female	-.275 (.082)	.001	.760	.646-.893
<i>Father's Education</i>				
Father_illiterate ^R				
Father_emedn	.298 (.125)	.017	1.347	1.054-1.720
Father_secedn	.373 (.128)	.004	1.451	1.130-1.864
Father_hiedn	.101 (.104)	.331	1.106	.903-1.356
<i>Place of Residence</i>				
Rural	.132 (.079)	.095	1.142	.977-1.333
<i>Use of Contraceptive</i>				
Trad_method ^R	.089 (.101)	.380	1.093	.896-1.332
Mode_method	.255 (.110)	.021	1.291	1.040-1.602
Others_method	.064 (.092)	.489	1.066	.890-1.276
<i>Wealth Index</i>				

Variable	B	Sig.	Odds ratio	95% C.I.
Poorest ^R				
Poor	1.121 (.130)	.000	3.069	2.379-3.960
Middle	.866 (.124)	.000	2.377	1.865-3.030
Richer	.593 (.122)	.000	1.810	1.424-2.300
Richest	.366 (.124)	.003	1.442	1.131-1.840
<i>Body Mass Index (BMI)</i>				
BMI \leq 18.5 kg/m ² ^R				
BMI \geq 18.5 kg/m ²	.976 (.082)	.000	2.654	2.260-3.116
<i>Breastfeeding</i>				
Within 1 st hour ^R				
More than 1 st hour	-.132 (.063)	.037	.876	.774-.992
<i>Mother's Age Cohort</i>				
15-19 ^R				
20-24	-.524 (.460)	.255	.592	.241-1.459
25-29	-.263 (.369)	.476	.769	.373-1.585
30-34	-.048 (.367)	.896	.953	.464-1.957
35-39	.008 (.369)	.983	1.008	.489-2.075
40-44	-.070 (.375)	.852	.933	.447-1.947
45-49	.011 (.403)	.979	1.011	.458-2.229
N	41751			
Cox & Snell R Square	0.085			
Nagelkerke R Square	0.113			
-2 Log-likelihood	7608.059			

R, reference category

Figures in the parentheses are SE of estimates

Source: Author's calculation

Table 4 represents that mother's education has a robust and positive effect on wasting relative to mothers with no education (model 1). The odds ratios for elementary (OD=1.633, SE=.127), secondary (OD=1.781, SE=.135) and higher level of education (OD=1.425, SE=.116) are more than one for all levels of education.

Father's educational status also has a significant effect on wasting. The prevalence of wasting is lower in the children whose father's level of education is elementary (OD=1.364, SE=.123) and secondary (OD=1.465, SE=.126). However, father's education above secondary level is not a necessary condition for wasting.

The prevalence of wasting is higher in children who are residing in rural areas. The result demonstrates a significant effect on wasting with high odd ratio (OD=1.168, SE=.078). As expected, due to poverty, rural people have low access to the health care facility and better sanitation that result in a high percentage of wasting.

Also, sex of the household is another variable which determines wasting. The prevalence of wasting is higher in the households which is headed by female (OD=.759, SE=.081). The result is statistically significant at 1 percent level of significance. Similar to this result, Burroway (2016) revealed an important finding that females are more efficient than their male counterpart to use resources on nourishment and other basic domestic needs.

There is a positive association between use of contraceptive and wasting. The prevalence of wasting is lower in those families who are using modern method of contraceptive (OD=1.307, SE=.109).

The forgoing analysis depicts that income is an important variable which determines wasting. The results confirm that wealth index of household has a strong and positive effect on reducing wasting in children. As expected, poor households do not provide nutritional food and better health and medical facilities to their children which result in a high rate of death and mortality. Due to low purchasing power, poor households do not afford the cost of expenditure and improved sanitation.

Here, BMI is used as a proxy of nutritional status of mother which has a significant and positive effect on wasting with high odd ratio (OD=2.597, SE=089). The coefficient is statistically significant at 1 percent level of significance.

In this model, mothers age cohort and sex of the child do not have a significant effect on wasting.

Table 4: Determinants of wasting using multiple logistic regression results

Variable	β	Sig.	Odd ratio	95% C.I.
<i>Mother's Education</i>				
Mother_illit ^R				
Mother_emedn	.490 (.127)	.000	1.633	1.273-2.094
Mother_secedn	.577 (.135)	.000	1.781	1.366-2.321
Mother_hiedn	.354 (.116)	.002	1.425	1.136-1.787
<i>Sex of Child</i>				
Child_boy ^R				
Child_girl	.075 (.055)	.172	1.078	.968-1.202
<i>Sex of Household</i>				
Male ^R				
Female	-.275 (.081)	.001	.759	.648-.890
<i>Father's Education</i>				
Father_illiterate ^R				
Father_emedn	.310 (.123)	.012	1.364	1.071-1.736
Father_secedn	.382 (.126)	.002	1.465	1.145-1.875
Father_hiedn	.108 (.102)	.292	1.114	.911-1.362
<i>Place of Residence</i>				
Rural	.155 (.078)	.047	1.168	1.002-1.360
<i>Use of Contraceptive</i>				
Trad_method ^R	.100 (.100)	.317	1.105	.909-1.343
Mode_method	.267 (.109)	.014	1.307	1.055-1.617
Others_method	.075 (.091)	.410	1.078	.902-1.288
<i>Wealth Index</i>				
Poorest ^R				
Poor	1.103 (.128)	.000	3.013	2.346-3.868
Middle	.836 (.122)	.000	2.307	1.818-2.928
Richer	.561 (.120)	.000	1.752	1.385-2.217
Richest	.348 (.122)	.004	1.416	1.116-1.798

Variable	β	Sig.	Odds ratio	95% C.I.
<i>Body Mass Index (BMI)</i>				
BMI \leq 18.5 kg/m ² ^R				
BMI \geq 18.5 kg/m ²	.954 (.080)	.000	2.597	2.218-3.040
<i>Breastfeeding</i>				
Within 1 st hour ^R				
More than 1 st hour	-.187 (.055)	.001	.829	.744-.924
<i>Mother's Age Cohort</i>				
15-19 ^R				
20-24	-.495 (.443)	.264	.610	.256-1.452
25-29	-.222 (.354)	.530	.801	.400-1.603
30-34	-.031 (.352)	.929	.969	.486-1.932
35-39	.033 (.354)	.927	1.033	.517-2.066
40-44	-.069 (.360)	.849	.934	.461-1.893
45-49	-.023 (.387)	.953	.978	.458-2.087
N	41751			
Cox & Snell R Square	0.087			
Nagelkerke R Square	0.116			
-2 Log-likelihood	7595.278			

R, reference category

Figures in the parentheses are SE of estimates

Source: Author's calculation

The logit estimates of table 5 demonstrates that the effect of mother's education on child underweight is negative, with the high odds ratio more than one in each level of education and coefficients are statistically significance at 1 percent levels of significance. The rates of underweight were lower among children whose mothers have elementary (OD=1.984, SE=.136), secondary (OD=1.764, SE=.146) and higher level of education (OD=1.497, SE=.126) in comparison to mothers with no education.

This result is supported by many other studies in the domain of health and education research which prove that educated and qualified mothers are contributing factors for reducing malnutrition (Frosta et al., 2005; Basu & Stephenson, 2005; Miller & Rodgers, 2009; Cleland, 2010; Bbaale, 2014). Waihenya et al. (1996) described that child whose mothers have received elementary education they lower malnutrition rate in comparison to those whose mothers have completed higher education, especially in case of stunting.

The effect of father's education on children underweights at (OD=1.459, SE=.131), secondary (OD=1.368, SE=.134) level is found to be statistically significant, with the high odd ratio. However, our result is unfavourable in case of fathers who have earned higher education. It suggests that there is essential to provide education to the fathers up to the secondary level for dipping underweight in children.

Girl children have higher relative odds of 1.059 for underweight in comparison with their boy counterparts and though, this association is not statistically significant. In our society, it is hypothesized that girl children are supposed to be nutritionally ignored due to their low status in society and hence are expected to be more underweight. No significant association is found between sex of household and underweight. However, a

significant association is observed between location of household and underweight. Children residing in rural areas (OD=1.154, SE=.082) are at higher risk of underweight as that of children residing in urban areas, however, the coefficient is statistically significant at 10 percent level of significance.

The estimated results indicate a significant and robust association between family using the modern method of contraceptive and underweight. The rates of underweight in children were lower whose family is using modern method of contraceptive (OD=1.485, SE=.113) in reference to a family not using any contraceptive.

Similarly, a significant association is observed between the wealth status of the households and underweight. Higher odds of underweight were observed among children who belonged to poor wealth quartile (OD=2.562, SE=.131) than that of the richest income quartile. Household's level of living also determine the children's nutritional status as result shows that children from the poorest household are more likely to malnourished than children from the richer and richest wealth quintile.

The findings of logit regression demonstrate that children whose mother's BMI is ≥ 18.5 have statistically significant at 1 percent level of significance with a low odds ratio (OD=.091, SE=.083). According to NFHS-4 report, the percentage of women whose BMI was below normal (BMI<18.5 kg/m²) was 25.3 percent and children age 6-59 months who were anemic, was 63.2 percent. It is appalling to note that in Uttar Pradesh, more than half of pregnant women (51%) aged 15-49 years were anemic in 2016. However, in our result there is no significant association found between mother's age cohort and underweight in children.

Table 5: Determinants of underweight using multiple logistic regression results

Variable	B	Sig.	Odd ratio	95% C.I.
<i>Mother's Education</i>				
Mother_illit ^R				
Mother_emedn	.685 (.136)	.000	1.984	1.518-2.592
Mother_secedn	.567 (.146)	.000	1.764	1.325-2.348
Mother_hiedn	.404 (.126)	.001	1.497	1.171-1.915
<i>Sex of Child</i>				
Child_boy ^R				
Child_girl	.057 (.058)	.323	1.059	.945-1.187
<i>Sex of Household</i>				
Male ^R				
Female	-.089 (.085)	.296	.915	.774-1.081
<i>Father's Education</i>				
Father_illiterate ^R				
Father_emedn	.377 (.131)	.004	1.459	1.128-1.886
Father_secedn	.313 (.134)	.019	1.368	1.052-1.780
Father_hiedn	.160 (.111)	.149	1.173	.944-1.457
<i>Place of Residence</i>				
Rural	.143 (.082)	.081	1.154	.983-1.354
<i>Use of Contraceptive</i>				

Variable	B	Sig.	Odds ratio	95% C.I.
Trad_method ^R	.133 (.105)	.204	1.142	.930-1.402
Mode_method	.395 (.113)	.000	1.485	1.189-1.854
Others_method	.037 (.096)	.699	1.038	.860-1.252
<i>Wealth Index</i>				
Poorest ^R				
Poor	.941 (.136)	.000	2.562	1.961-3.348
Middle	.728 (.131)	.000	2.072	1.604-2.677
Richer	.542 (.129)	.000	1.719	1.334-2.215
Richest	.460 (.131)	.000	1.584	1.224-2.049
<i>Body Mass Index (BMI)</i>				
BMI ≤18.5 kg/m ² ^R				
BMI ≥18.5 kg/m ²	-1.657 (.083)	.000	.191	.162-.225
<i>Breastfeeding</i>				
Within 1 st hour ^R				
More than 1 st hour	-.015 (.065)	.821	.985	.867-1.120
<i>Mother's Age Cohort</i>				
15-19 ^R				
20-24	-.466 (.469)	.320	.628	.251-1.573
25-29	-.166 (.368)	.652	.847	.411-1.743
30-34	.034 (.366)	.927	1.034	.505-2.118
35-39	.023 (.367)	.949	1.024	.498-2.102
40-44	.042 (.374)	.910	1.043	.501-2.172
45-49	.251 (.402)	.533	1.285	.584-2.826
N	41751			
Cox & Snell R Square	0.118			
Nagelkerke R Square	0.159			
-2 Log-likelihood	6973.408			

R, reference category

Figures in the parentheses are SE of estimates

Source: Author's calculation

5. Conclusions

This paper examined the effect of socio-economic factors on child malnutrition status in Uttar Pradesh using data from NFHS-4. This study accounts for maternal level information such as the educational level of mother, malnutrition of mother (BMI as a proxy) and age cohort of the mother that appears to cause malnutrition in children. Among socio-economic determinants, mother's education beyond elementary level emerged as a significant factor that influenced stunting, wasting and underweight of children belonging to the age of five. This result was buttressed by other empirical studies and their results confirmed that mother's educational level beyond secondary level reduces the child nutrition outcomes (Bbaale, 2014).

However, the result was not supportive in case of father's educational level more than secondary. It indicated that father's educational level up to secondary was necessary to lower the rate of stunting, wasting and underweight in children. The analysis revealed

that sex of the household, sex of the child and mother's age cohort no longer affected the rate of stunting, wasting and underweight of children. However, place of residence determines a significant and positive effect on nutritional status of the children. It means if children reside in rural areas, they were more wasted in reference to those who were residing in urban areas as given the fact that urban settings usually have improved ailment prevention forces. Recently, Government of India has introduced two major health programmes, for instance, Ayushman Bharat Pradhan Mantri Arogya Yojana (PM-JAY) in September 2018, in order to provide primary, secondary and tertiary level treatments to the poor and vulnerable and secondly, National Rural Health Mission in April 2005 with the aim of enlightening the accessibility of and access to universal health care for individuals living in rural areas. The study finds that wealth index is also more likely to be an imperative factor which exhibits a lower level of child malnutrition. It also represents if households belonging to the richest quintile of wealth index, children's live better quality of life and low mortality.

Based on our findings, the present study suggests that malnutrition in children is the result of multiple factors. Low rate of female education is the principal factor for child malnutrition, and this happens due to many socio-cultural reasons. To improve the status of health and nutritional outcome, Government of India has launched many programmes, however, more emphasis should also be given to improvement in female education, employment opportunities to enhance economic status, access to rural nutrition, awareness about use of contraceptive. Wealth status is another determinant which indicates high incidence of poverty is a persistent problem affecting the ability to access and attain an adequate diet.

This estimate shows the scarcity of material possession and unavailability of basic needs to the poor which results in low demand for energy and protein intake. To improve nutritional status of children, the state needs to eradicate all forms of poverty and to provide employment opportunities to the poor.

The study recommends that efforts to improve female education need to be combined with more specific schemes to progress and better child rearing practices. Also, it is important to recommend that civic programmes to ensure education to female on how to feed infants and safe them from infection, and adequate, accessible health services to avoid and treat infections can collectively reduce malnutrition in children. Our results show that family using modern of contraceptive is associated with positive child health outcomes. Therefore, the present study suggests that government, donors, and private players/NGO can perform an imperative role in improving women's access to modern healthcare services by ensuring affordability at the regional level.

References

- Ahmed, T., Roy. S. & Alam. N. (2012). Determinants of undernutrition in children under 2 years of age from rural Bangladesh", *Indian Pediatric*, 49: 821–24.
- Allen, L.H. & Gillespie, S.R. (2001). *What works?: A review of the efficacy and effectiveness of nutrition intervention*. ACC/SCN Nutrition Policy Paper, 19, 27–8.

- Bangladesh Demographic & Health Survey (2007). Dhaka, Bangladesh and Calverton, Maryland [USA]: National Institute of Population Research and Training, Mitra and Associates, and Marco International.
- Basu, A. M., & Stephenson, R. (2005). Low levels of maternal education and the proximate determinants of childhood mortality: a little learning is not a dangerous thing. *Social Science & Medicine*, 60(9), 2011-2023.
- Bbaale, E. (2014). Maternal education and child nutritional status: evidence from Uganda, African. *Journal of Economic and Management Studies*, 5(1), 52-74.
- Burroway, Rebekah (2016). Empowering women, strengthening children: a multi-level analysis of gender inequality and child malnutrition in developing countries. *Gender and Food: From Production to Consumption and After*, 22, 117-142.
- Caldwell, J. (1979). Education as a factor in mortality decline: an examination of Nigerian Data, *Population Studies*, 33(3), 395-413.
- Case, A. (2001). Does money protect health status? Evidence from South African pensions. NBER working paper no. 8495.
- Case, A., Lubotsky, D. & Paxson, C. (2002). Economic status and health in child: the origins of the gradients. *American Economic Review*, 95(5), 1308-1334.
- Choudhury, P.K. (2015). Explaining the role of parental education in the regional variations in infant mortality in India. *Asia & The Pacific Policy Studies*, 2(3), 544-572.
- Cleland, J. (2010). The benefits of educating women. *The Lancet*, 376(9745), 933-934.
- Das, Sibabrata & Sahoo, Harihar (2011). An investigation into factors affecting child undernutrition in Madhya Pradesh. *Anthropologist*, 13(3), 227-233.
- Dasgupta, M., Lokshin, M., Gragnolati, M. & Ivaschenko, O. (2005). *Improving Child Nutrition Outcome in India-Can the Integrated Child Development Services Program be More Effective?* World Bank Policy Research Working Paper No. 3647. World Bank, Washington, DC.
- Desai, S., & Alva, S. (1998). Maternal education and child health: is there a strong casual relationship? *Demography*, 35(1), 71-81.
- Deshmukh, P.R., Sinha, N. & Dongre, A.R. (2013). Social determinants of stunting in rural area of Wardha, Central India. *Medical Journal Armed Forces India*, 69, 213-217.
- Frost, M. B., Forste, R., & Haas, D.W. (2005). Maternal education and child nutritional status in Bolivia: finding the links. *Social Science & Medicine*, 60(2), 395-407.
- Glewwe, P. (1999). Why does mother's schooling raise child health in developing countries? Evidence from Morocco. *Journal of Human Resources*, 34(1), 124-159.
- Govindasamy, P. & Ramesh, B.M. (1997). Maternal education and utilisation of maternal and child health services in India. NFHS subject reports, Number 5, International Institute of Population Sciences, Mumbai.
- Grantham-McGregor, S. Cheung, Y.B. Glewwe, P. Richter, L. & Strupp, B. (2007). Developmental potential in the first 5 years for children in developing countries. *Lancet*, 369 (9555): 60-70.
- Haddad, L., Alderman, H., Appleton, S., Song, L., & Yohannes, Y. (2003). Reducing child malnutrition: how far does income growth take Us? *The World Bank Economic Review* 17 (1),107-131.
- Headey, D., (2013). Developmental drivers of nutritional change: a cross-country analysis. *World Development*, 42, 76-88.

- Heltberg, R., (2009). Malnutrition, poverty, and economic growth. *Health Economics*, 18 (S1), S77–S88.
- Horton, S. (1998). Birth order and child nutritional status: evidence from the Philippines. *Economic Development and Cultural Change*, 36(2), 341-354.
- Mazumdar, S. (2010). Determinants of inequality in child malnutrition in India. *Asian Population Studies*, 6(3), 307-333.
- Measham, A.R. & Chatterjee, M. (1999). Wasting away: The crisis of malnutrition in India. Washington, DC: World Bank.
- Miller, J. E., & Rodgers, Y. (2009). Mother's education and Children's nutritional status: new evidence from Cambodia. *Asian Development Review*, 26(1),131-165.
- Miller, J.E., & Rodgers, Y.V. (2009). Mother's Education and Children's Nutritional Status: New Evidence from Cambodia. *Asian Development Review*, 26(1), 131-165.
- Mishra, V.K., Lahiri, S., & Luther, N.Y. (1999). Child nutrition in India. National Family Health Survey Subject Reports 14 (June 1999). Mumbai, India: International Institute for Population Sciences, and Honolulu, Hawaii, USA: East-West Center.
- Mondal, N.I., Hossain, K., & Ali, K. (2009). Factors influencing infant and child mortality: a case study of Rajshahi district, Bangladesh. *Journal of Human Ecology*, 26(1), 31-39.
- Moore, A.C., Akhter, S., & Aboud, F.E. (2006). Responsive complementary feeding in rural Bangladesh. *Social Science & Medicine*, 62, 1917–30.
- Nussbaum, M. (2004). Women's education: A global challenge. *Signs: Journal of Women in Culture and Society*, 29(2), 325-355.
- Patel, A., Badhoniya, N., Khadse, S., Senarath. U., Agho, K.E., & Dibley, M.J. (2010). Infant and young child feeding indicators and determinants of poor feeding practices in India: secondary data analysis of National Family Health Survey 2005-06. *Food and Nutrition Bulletin*, 31, 314-33.
- Sastry, N., (1997). What explains rural-urban differentials in child mortality in Brazil? *Social Science and Medicine*, 44(7), 989-1002.
- Sen, A. (1999). Development as freedom. New York, NY: Anchor Books.
- Sethuraman, K., Lansdown, R. & Sullivan, K. (2006). Women's empowerment and domestic violence: The role of sociocultural determinants in maternal and child undernutrition in tribal and rural communities in South India. *Food and Nutrition Bulletin*, 27(2), 128-143.
- Shetty, P.S. & James, W.P.T. (1994). Body mass index: a measure of chronic energy deficiency in adults. Rome, Italy: Food and Agriculture Organization of the United Nations, (FAO food and nutrition paper 56).
- Smith, L.C., & Haddad, L.J., (2000). Explaining Child Malnutrition in Developing Countries, Technical report. International Food Policy Research Institute (IFPRI), Washington, DC .
- Subramanyam, M.A., Kawachi, I., Berkman, L.F. & Subramanian, S.V. (2010). Socioeconomic inequalities in childhood undernutrition in India: Analyzing trends between 1992 and 2005. *PLoS One*, 5(6), e11392.
- Svedberg, P. (2008). Why malnutrition in shining India persist. 4th Annual Conference on Economic Growth and Development, New Delhi, 2008.
- Tarozzi, Alessandro & Mahajan, Aprajit (2007). Child nutrition in India in the nineties. *Economic Development and Cultural Change*. University of Chicago Press, 55(3), 441-486.

- Thomas, D., Strauss, J., & Henriques, M.H. (1991). How does mother's education affect child health? *Journal of Human Resources*, 26(2), 183-211.
- United Nations (2019). Transforming Our World: The 2030 Agenda for Sustainable Development.
<https://sustainabledevelopment.un.org/post2015/transformingourworld>.
- Waihenya, E.W., Kogi-Makau, W. & Muita, J.W. (1996). Maternal nutritional knowledge and the nutritional status of preschool children in a Nairobi slum. *East African Medical Journal*, 73, 419-423.
- Walker, S.P., Wachs, T.D., Gardner, M., Lozoff, B., Wasserman, G.A., Pollitt, E. & Carter, J.A. (2007) Child development: risk factors for adverse outcomes in developing countries. *The Lancet*, 369(9556), 145-157.
- Wemakor, A., Garti, H., Azongo, T., Garti, H., & Atosona, A., (2018). *Young maternal age is a risk factor for child undernutrition in Tamale Metropolis, Ghana*. BMC Research Note, 11: 877.
- WHO (1978). *A Growth Chart for International Use in Maternal and Child Health Care*. WHO: Geneva
- WHO (2010), Nutrition Landscape Information System (NLIS) Country Profile Indicators. Geneva, Switzerland.
- World Bank (2006), Repositioning Nutrition as Central to Development A Strategy for Large-Scale Action. Washington DC, USA.

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EDUCATION IN PRISONS – AN ESSENTIAL FACTOR IN PREVENTING RECIDIVISM. THE ROLE OF DETENTION OFFICERS IN THE EDUCATIONAL PROCESS

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Abstract: *The success of reintegration into the society of persons deprived of their liberty depends, to a large extent, on the educational programs performed in prisons. Previous studies on prison education have mainly focused on programs aimed at developing life skills or transmitting professional competences relevant to the labor market after release. A less analyzed aspect was focused on the impact of positive role models in the educational process and how exposure to this role models influence their reintegration after release. Prison staff, especially those with whom detainees interact daily, influence their perceptions on the time spent in prison, as well as the way they relate to the period following their release. If the way detention officers manage day-to-day activities and interaction with detainees is perceived as fair, equitable and in line with the rules of detention, positive patterns of behavior appear, with a beneficial impact on compliance with prison rules, participation in educational programs and social reintegration following their release. By creating positive role models, detainees will have healthy benchmarks to follow, the effectiveness of educational programs offered in prisons will increase significantly and, thus, inmates will be able to reintegrate more easily into society, playing an active role in the community they belong to. This article examines previous studies from Europe concerning the influence of positive role models among detention officers on the behavior of detainees, with the purpose of identifying good practices that can be adapted to the Romanian prison system context.*

Keywords: *reintegration, prison education, positive role models*

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1. Overview

Education in prison represents one of the main pillars of the successful reintegration of detainees into society. Educational programs contribute to the development of skills to unlock their potential, to get a job, create families and contribute to their community development. The educational programs conducted in prisons are meant to keep and improve the ties with the realities outside the prison walls, improve their well-being through diversity of daily activities and contact with different persons (facilitators).

The efficiency of prison education not only improves the detainee's quality of life and his/her chances to be rehabilitated but also benefits the community by correcting some of the behavior traits that contributed to his/her misbehavior and reducing the costs of reoffending.

The United Kingdom offers a well-documented case study, due to the interest of the government and research bodies addressing reoffending. In UK, the total estimated economic and social cost of reoffending was £18.1 billion in 2016 (Alexander et al., 2019). Considering this issue and means to address it, the decision-makers within the UK justice system (Rt Hon Michael, 2015) acknowledged the challenges that the prison system is facing, especially the high rate of recidivism: 45% of adult prisoners re-offending within one year of release, for those who served shorter sentences of less than 12 months the figure rises to 58.4%, while for juvenile offenders 68.9% committed a new offense within a year of release (Ministry of Justice, 2017). Another problem (Rt Hon Michael, 2015) was the increased number of violent acts toward prisoners, prison staff and self-harm cases: in 2015, over 20,500 assault incidents occurred within prisons (27% increase from 2014), over 32,000 self-harm incidents happened (25% rose from 2014) (Dempsey et al., 2016).

In 2015, the prison population in England and Wales reached 84,500, representing an increase of 90% from 1990 (Dempsey et al., 2016). However, this rose is inversely proportional to the number of frontline operational staff employed. From 2010 onward, the number of detention officers in the public prisons has decreased by 26%, with 536 officers over the last 12 months (Ministry of Justice, 2016).

Several solutions were proposed to the UK legislators (Rt Hon Michael, 2015), especially regarding strengthening the role of education in the rehabilitation process of detainees. The persons under custody should get the literacy and numeracy skills needed to have a better chance to be employed and have a positive contribution to the community after their release. Also, the right incentives should be identified to motivate the detainees to learn and the prison staff to prioritize the educational process. In this regard, a review of the provision of education in prisons was conducted to analyze the current situation and to identify ways to increase the efficiency of the educational process for detainees (Ministry of Justice, 2015).

2. Improving Prison Education

A review on prison education (Dame Sally, 2016) was released in May 2016 and highlighted several recommendations. The focus was on making every contact matter,

promoting the importance of prison education and creating a new system to attract high caliber graduates to work for at least two years as correctional officers.

Every day detainees interact with a large number of persons, ranging from Governors, Senior Management, prison officers, teachers, instructors, official visitors and others. All of them are representatives of the prison system, they build up the image of the institution that detainees are perceiving and they all carry the responsibility to ensure that, in educative terms, all contacts matter. In order to adapt the current policy that emphasizes more on isolating the detainees from society and keeping the institution safe to one designed to enhance the personal growth of inmates, there should be a whole-organizational shift in approach toward education and workforce development.

The professional development plan should be extended to all staff members, this being a crucial element of the culture of change. Specialized training for staff working in different areas and levels of the prison should be expanded to offer a consistent approach toward education. Besides the professional development plan of existing staff and improving the initial training for new staff, attracting a different category of prison staff will facilitate the culture of change.

High performance staff should be motivated to undertake leadership, teaching and officer positions to reach the goal of having education as a central goal. Efficient practices and innovations should be identified, shared and rewarded across the prison system.

Prison Governors should have an adequate set of skills and tools to have more control of the educational process. They will have to undergo a thorough training and development process and an assessment of their abilities and progress should be part of their Personal Development Plan. Qualified experts can help ensure that educational services are harmonized so they can offer the highest business efficiency. Senior management should develop clearer career paths to recruit and retain the most talented staff members. There are many talented potential middle leaders employed by institutions that don't offer opportunities of career development and their skills could be easily transferable into the prison environment (e.g. from Further Education colleges and schools in rural areas). They could be motivated to experiment a career change, being driven by potential progress to a middle leadership position in prison.

3. Every Contact Matters

Good relationships between staff and prisoners are essential in ensuring that prisons are safe, decent and secure. Therefore, all correctional officers are expected to interact with prisoners regularly and to provide positive role models. This approach is reflected in the principle 'Every Contact Matters' (Mulholland, 2014), which form part of the new ways of working that are being introduced in all public sector prisons. Staff role modeling is intended also to improve relationships between prisoners.

The concept Every Contact Matters isn't new, it was inspired by the national initiative Making Every Contact Count (MECC) where staff in customer-facing roles is

encouraged to use every chance to engage with clients in subjects related to healthy lifestyles and give good advice (Public Health England et al., 2016).

The National Institute for Health and Care Excellence performed an exceptional review to examine the effectiveness of brief alcohol interventions compared to no or minimal intervention in reducing alcohol consumption. A number of sixty-nine randomized control trials (RCTs) and cluster RCTs were included (National Institute for Health and Care Excellence, 2019). The primary meta-analysis found that after 12 months there was moderate-quality evidence that brief interventions result in small but significant reduction in alcohol consumption (a decrease of 2 to 3 UK standards units of alcohol per week).

All interactions between detainees and detention officers are important, they have direct contact with all detainees 24/7, spent a large amount of time together, build up trust relations, count on their advice and support to solve most of their problems. They have contact with detainees that are unable or unwilling to participate in educational programs and might offer them the right guidance and motivation to enroll in the organized activities.

The initial basic training offered to new prison officers has undergone many improvements during the last years, however in order to have a stronger emphasis on supporting the vision of prisons as learning environments, these programs must be reshaped. Also, periodically, all members of the staff should undergo a refresher course to familiarize them with new policies and best practices in the field.

4. Offense Analogue Behaviors & Offense Replacement Behaviors

The security of prisons and education are interdependent, they are to be seen as a whole with strong ties. Dynamic security is defined as *“the development by staff of positive relationships with prisoners based on firmness and fairness, along with an understanding of their personal situation and any risk posed by individual prisoners”* (United Nations, 2015).

After their arrival in prisons all detainees are evaluated and an interventional plan is tailored for them. This evaluation also analyses the risk factors that predict recidivism and problematic behavior during his incarceration. Depending on the identified risks adequate programs are planned for the entire duration of his incarceration.

In their studies, Gordon and Wong (2010, 2015) use the term Offense Analogue Behaviors “OABs” concerning behavior interpreted as misconduct that can jeopardize safety and security (e.g. aggressive attitudes, passive refusal to obey orders). Persons don’t stop manifesting misbehavior after their incarceration; they only adapt to the new highly controlled environment (e.g., a person convicted for drug trafficking, can be involved in similar activities inside the prison). Identifying, monitoring and treating OABs is critical in reducing the risk factor of a detainee. By contrast, Offense Replacement Behaviors (ORBs) represent prosocial behaviors that should replace OABs. Both, OABs and ORBs should be treated in a direct connection, every time bad behavior is removed, something must replace it. A person with anger management

problems is not expected to become emotionless, instead he should develop effective communication skills and prosocial modes of managing his anger.

The task of monitoring and reducing OABs and replacing them with ORBs belongs to all frontline staff who have direct interaction with detainees (Atkinson & Mann, 2012) and should be performed 24/7. Every contact with a detainee represents an opportunity to influence his behavior (Gordon & Wong, 2010, 2015).

Dowden and Andrews (2004) demonstrated in their meta-analysis that the use of Core Correctional Practices (CCPs) are associated with reductions in security incidents and decreased recidivism. The CCPs are essential in reducing OABs and increasing ORBs.

- **Relationship practices:** Show tolerance, respect, flexibility, warmth, empathy, humor and a positive attitude. In many cases, detainees have histories of dysfunctional relationships, and demonstrating healthy attitudes raises the potential for positive reciprocal interactions (Andrews et al., 1990, pp. 36-37).
- **Effective use of authority:** Staff should be calm, impartial and clear in the interactions with detainees, encouraging and offering positive feedback while trying to increase ORBs.
- **Prosocial role modeling:** Staff must lead by example, they have all skills needed to live in the community. They can role model healthy relationships with family and friends, professionalism, respect, problem-solving, patience, correct communication, and breed these qualities to detainees.
- **Effective reinforcement:** Staff should highlight ORBs and encourage them.
- **Effective disapproval:** Equally important to encouraging ORBs is to discourage OABs. The staff should identify the problematic behavior and offer positive feedback.

Research findings show that decreased OABs and increased ORBs are associated with lower rates of institutional and community recidivism (Beggs & Grace, 2011; Coupland & Olver, 2020a, 2020b; Lewis et al., 2013; Olver et al., 2018).

5. Unlocked Graduates program

A promising initiative was to create a new employment scheme that would attract graduates from top universities to work as detention officers for an initial period of two years. Their main tasks would be related to security, supervision and support, but also play an active role in developing the educational process across the regime through different activities. At the end of the two years engagement, those that want to continue to work in the prison system would receive support to develop their careers and access senior leader and Governor positions.

The Unlocked Graduates program was one of the key recommendations of the Coates' Review of prison education. The concept of this program isn't new, it was inspired by the national initiative "Teach First" launched in 2002, based on the best practices learned from the program Teach for America, formed in 1990.

Unlocked Graduates program eliminated some stereotypes related to the image of the correctional officer. To reach this goal, they tried attracting high achievers to work in prisons for at least two years as correctional officers, in direct contact with detainees. The program included the following benefits:

- They were enrolled in a fully-funded Master's program on leadership
- They received internship opportunities with one of the supporting organizations (KPMF, Howard League, Ministry of Justice or the African Prisons Project).
- They were offered the opportunity to make proposals of pilot projects relevant to the workplace and have the chance to implement them
- At the end of the two years, they would receive support either to advance within the prison system or choosing a different career path with the supporting organizations

6. Conclusions

Prison education is to be seen equally important as any other security aspect related to prisons. Detainees that receive adequate educational support not only have a better chance to reintegrate in community playing an active role and following all social rules, but also accept easier all the limitations that the highly controlled environment in prison imposes on them. Thus, better order is maintained in the prison environment, lower rates of incidents will be recorded and the overall mission of the institution is to be achieved.

Improvements toward education in prisons could be achieved only if all stakeholders are involved in the process, from policy makers to the frontline officers. The educational system already in place demonstrated its relevance in reducing the rate of recidivism, however there is always enough space to improve. In Romania, all aspects of education in prisons are managed by the Educational Compartments, without the active support of the other sectors in the penitentiary units.

Considering the work overload, which, due to staff shortage, is a common phenomenon in the Romanian penitentiary system, integration of the presented good practices in the work schedule might be perceived as extra tasks and responsibilities. The additional time invested in tasks related to education produces significant benefits, due to improvements of the staff relation with detainees and through supporting the social reintegration of offenders. Having this approach would improve dynamic security, as well as strengthen the collective effort to reduce reoffending.

Investments in the training of staff, new employment schemes to attract high achievers, the use of prosocial modeling, working to improve behavior and showing care in every contact with detainees will improve the quality of life for detainees, but also of detention officers. Creating a friendly work environment improves the welfare for staff and increases job satisfaction, making the job more appealing to the public, creating thus an attractive career path for highly talented graduates.

Authorship

A.P. and M.T. contributed equally to the study.

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Declaration of conflicting interests

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References

- Alexander, N., Xenner, M., Steven, E., & Maryam, A. (2019). *Economic and social costs of reoffending. Analytical report*. Ministry of Justice Analytical Series, 10, ISBN 978-1-84099-887-0.
- Andrews, D. A., Bonta, J., & Hoge, R. D. (1990). Classification for rehabilitation: Rediscovering psychology. *Criminal Justice and Behavior*, 17, 19-52.
- Atkinson, D. F., & Mann, R. E. (2012). Prison officers as observers of offense paralleling behaviors: an untapped resource? *The Journal of Forensic Psychiatry and Psychology*, 23, 139-155.
- Beggs, S. M., & Grace, R. C. (2011). Treatment gains for sexual offenders against children predict reduced recidivism: A comparative validity study. *Journal of Consulting and Clinical Psychology*, 79, 182-192.
- Coupland, R. B. A., & Olver, M. E. (2020a). Assessing dynamic violence risk in a high-risk treated sample of violent offenders. *Assessment*, 27(8), 1886-1900.
- Coupland, R. B. A., & Olver, M. E. (2020b). Assessing protective factors in treated violent offenders: Associations with recidivism reduction and positive community outcomes. *Psychological Assessment*, 32(5), 493-508
- Dame Sally, C. (2016). *Unlocking Potential: A review of education prison*. UK Ministry of Justice, May 2016.
- Dempsey, N., & Allen, G. (2016) *Prison Population Statistics*. House of Commons Library Briefing Paper, SN/SG/04334.
- Dowden, C., & Andrews, D. A. (2004). The importance of staff practice in delivering effective correctional treatment: A meta-analytic review of core correctional practice. *International Journal of Offender Therapy and Comparative Criminology*, 48, 203-214.
- Gordon, A., & Wong, S. C. P. (2010). *Offense analog behaviors and indicators of criminogenic need and treatment progress in custodial settings*. In M. Daffern, L. Jones, and J. Shine (Eds.): *Offense paralleling behavior: An individualized approach to offender assessment and treatment* (pp. 171- 184). Oxford, UK: Wiley.

- Gordon, A., & Wong, S. (2015). The use of a structured guide to assess proxies of offending behaviors and change in custodial settings. *Journal of Forensic Practice*, 17, 83-100.
- Lewis, K., Olver, M. E., & Wong, S. C. P. (2013). The Violence Risk Scale: Predictive validity and linking treatment changes with recidivism in a sample of high-risk offenders with psychopathic traits. *Assessment*, 20, 150-164.
- Ministry of Justice (2015). Review of Prison Education. Terms of reference. London.
- Ministry of Justice (2016). National Offender Management Service workforce statistics: September 2016, London.
- Ministry of Justice (2017) Proven Reoffending Statistics Quarterly Bulletin, October 2014 to September 2015
- Mulholland, I. (2014). Perrie Lecture 2013: Contraction in an Age of Expansion: An Operational Perspective in. *Prison Service Journal*, 211, 14-18.
- National Institute for Health and Care Excellence (2019). Exceptional surveillance of behavior change: individual approaches (NICE guideline PH49). Surveillance report.
- Olver, M. E., Mundt, J. C., Thornton, D., Beggs Christofferson, S. M., Kingston, D. A., Sowden, J. N., Nicholaichuk, T. P., Gordon, A., & Wong, S. C. P. (2018). Using the Violence Risk Scale-Sexual Offense Version in sexual violence risk assessments: Updated risk categories and recidivism estimates from a multisite sample of treated sexual offenders. *Psychological Assessment*, 30, 941-955.
- Public Health England, NHS England and Health Education England (2016). Making Every Contact Count (MECC): Consensus, April 2016.
- Rt Hon Michael, G. (2015). *The treasure in the heart of man - making prisons work*. Speech was given at Prisoners Learning Alliance, 17 July 2015.
- Rt Hon Michael, G. (2015) *Education in prison. Announcement of a review of education in adult prisons*. Written statement to Parliament, 8 September 2015
- United Nations (2015). *Handbook on dynamic security and prison intelligence*, 29.

DYNAMICS OF CITIZENS' SATISFACTION ON E-SERVICE DELIVERY IN LOCAL GOVERNMENT INSTITUTIONS (UNION PARISHAD) IN BANGLADESH

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Abstract: *The necessity for modernizing the public sector is repeatedly driven by a need to make public service delivery more effective and responsive to citizens' aspirations. In this regard, Information and Communication Technology (ICT) is considered an efficient instrument for delivering better service delivery to citizens. Innovative uses of ICTs in Bangladesh also deal with new modes of providing information and various public services to allow citizens' accessibility through local government institutions. Better performances in public services may generate satisfied clients, which will in turn enhance satisfaction in government and more trust in local institutions. This paper maps perceptions of citizens as regards e-service delivery performance and citizens' satisfaction with local government institutions.*

Keywords: *E-Government, Citizen's Satisfaction, E-service delivery, Union Parishad, Bangladesh*

1. Introduction

E-Government can be largely expressed as the usage of the Internet and information and communication technologies (ICTs) to improve actions of public institutions for the benefit of citizens (Teo et al., 2008). This is because ICT standardizes service

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provisions, uniform service delivery, and makes public institutions more accountable and transparent. Although ICTs have been in practice in the government sphere for over fifty years in the context of Bangladesh and especially at the local level this is a recent phenomenon. The cumbersome government's standard operating procedures in decision-making processes led to delays much to the dissatisfaction of citizens in public institutions. To streamline and modernize processes of decision-making and to enhance more communications with citizens, ICTs have been introduced even at the local level. The local government at the lowest level in Bangladesh has now embraced ICT allowing rural people access to the internet and communicates online with the rest of the world. Although the uses of ICT especially by the banking sector and other private interests such as mobile phone operators have penetrated the rural areas to ease monetary transactions from home and abroad, it is recently that the public sector has introduced ICT. The key objective of this paper is to measure the perceptions of citizens towards e-service delivery performance and citizens' satisfaction with local government institutions. So, it is essential to know about the influencing factors which are involved in building citizen's satisfaction.

The paper basically focused on three issues including:

- 1) To assess the present status of citizens' satisfaction on e-service delivery in Union Parishad in Bangladesh.
- 2) To identify the challenges on the way of e-service receiving at the Union level.
- 3) To propose some recommendations to overcome the challenges and improve the e-service delivery.

2. Union Digital Center (UDC)

To serve citizens and reduce rigidity, the Government of Bangladesh introduced the Union Digital Center (UDC), which is a one-stop service delivery channel situated at every Union, which is the lowest tier of the local government system. As part of realizing the Digital Bangladesh pledge and achieving the status of a middle-income country, UDCs are considered an effective tool to realize these long-term goals of the government. UDCs are comparable to the 'telecentre' idea by the private sector and based on the idea of Public-Private Partnership (PPP). There are 4,501 UDCs located at every Union throughout the country, and in 2010, around 9002 young entrepreneurs comprising 50% females are employed at UDCs. Entrepreneurs are self-employed who sustain their livelihood with their own generated individual revenue. The major challenge of UDC is how entrepreneurs reap the benefits of this ICT initiative and become self-sustainable through the PPP mode (Hoque & Sorwar, 2015). UDC provides an array of services to local users as well as to other institutions. These include birth registration, life insurance, telemedicine, land records, and foreign employment application as well as telephone services, mobile banking, etc. Given UDC's utility at the local level, various international institutions are also interested to use its services to serve the local population. This is helping to promote UDCs' entrepreneurs to increase their financial incomes. For example, Practical Action Bangladesh is using UDC services for delivering marine fisheries, agriculture, and livestock facilities, UNESCO is

promoting non-formal education while the British Council is recommending prospects of studying English as a language through UDC (Zaman, 2015). The Government of Bangladesh has projected that UDC is considered to be one of the most effective tools through which rural disadvantaged people can be empowered through the use of ICT and reduce asymmetry in information and knowledge.

3. E-Service Delivery, Performance and Citizen's Satisfaction

The transformation of ICT has been shifting human conduct, administration of businesses, and governance of nations. Communication is, actually, much simpler through the internet and mobile gadgets. The upper and lower levels of government have progressively applied the internet as a way of the facility and transfer of public possessions and facilities. E-government has the authority to raise citizen effort to the government; progress endorsed decision-making and raise the level of transparency of government dealings (Kim, 2007). The welfares of e-governance are easily accessible and reliable to citizens. It contains inclusive facilities, keeping of time and cost, greater clarity, better collaboration, better awareness, better examining and mechanism, decision-making etc. However, in the contemporary past, studies maintained with an experiential study are being frequently described in e-governance works, e-governance performance events grounded on viewpoints of crucial stakeholders going to diverse undertakings are usually missing (Suri & Sushil, 2017).

Performance management is whatever anyone acts to progress or whatever anyone acts to uphold superior performance. Performance management can signify accomplishing the performance of an established mentor an entity. Performance facts must facilitate leaders to comprehend how satisfactory the establishment, functions of the establishment, and persons are doing. Efficient performance management must validate that: one understands what an individual is intending for, one understands what individuals have to perform to experience individuals aims, one understands in what way to evaluate advancement to one's aims and one can identify performance difficulties and make a solution of them (Isaac, 2007). Public principles assist as vital actions for e-government performance (Chen et al., 2019). E-government accelerates government service, performance, and trust among citizens in public institutions. Government has to reinforce its management capability, for example, strategic formation, performance supervision, interacting, and governance, to confirm the suitable performance of e-government (Yang & Rho, 2007). This study focuses on citizen's satisfaction with e-service delivery as the key issue.

4. Citizens' Satisfaction on E-service Delivery

Citizen contentment is of pronounced significance to government organizations that perform as facility suppliers to their people (Mishra & Geleta, 2020). Government has the potential to rise citizen fulfillment with management by employing the ICT appropriately, particularly on the internet. This upgraded network of communication confirms the availability and wholeness of public information and service transfer in a

farther suitable method. Citizen satisfaction with e-government facilities is connected with citizen's views. Service productivity is measured as performance dimensions and service results are as citizen satisfaction (Saha et al., 2010).

5. Methodology

This is a qualitative study based on several in-depth interviews including interviews of the chairman of the UP, one UP Members, one official, and interviews of persons from the UP. This study aimed at the dynamics of citizens' satisfaction on E-service delivery in Local Government Institutions in Bangladesh and find out the major dispute and contributions. It also highlights the role of the UP interaction. To address the research aim, all cases were condensed substantively data to facilitate the cases paying attention and highlighted. This study is generally based on primary and secondary data. These primary data were collected during December 2020. To maintain primary data, secondary data were also utilized. To accomplish the study the qualitative method is followed and the cases were selected based on indicators and finally, data were collected from the Cumilla zone of Bangladesh. Nevertheless, the sample design of the study is given in Table 1.

Table 1: Sample design of the study

Division	District	Upazila	Union	Participants	
Chittagong	Cumilla	Comilla Sadar	6 No Jagannathpur Union	Chairman	1
				Secretary	1
				Officials/Staffs	2
				General People	2
				Total	6

Source: Own representation

Based on the case studies, it was initiated that e-governance has contributed to various aspects of the grassroots level. It is noted some evidence from case studies to facilitate E-Governance and it indicates many of the problems and describable facilitates of getting updating service. The following case explains how ICT-based information and service improve service delivery. The following cases will reveal the challenges and contribution of the E-service at the Union level.

Case 1: Roma Akter (pseudonym) is a 40-year-old and she is a Union female Secretary in ward no. 12. Recently she has transferred here from another Union. Our union provides various services like distributing national ID cards, land transmits deed registration, passport issue, car registration, driver's license, law & order maintenance, birth & death certificate, education, and health care, etc. The online platform is exercised in delivering public services to the people. It gives confidence in citizen involvement in the management process and its creation of government more answerable, transparent, and efficient. Online service increased the citizen's satisfaction by providing information and services smoothly. As I am a Union secretary, I manage all e-files finely. No problem has arisen. If no hostility is found within the specific period, I correct the file rights as well. If any doubt is found, then the chairmen monitoring the matter. In some e-service, there need various documents to justify, but generally, people do not fulfill the requirements. There are not show require a certificate. Trade license, citizenship certificate is also issued. Currently, all services are online-based for corona situations. I think Union Office has the necessary staff. IT has enough equipment, but as a secretary, I don't have an official computer yet, I manage e-services through mobile. There is somewhat problematic arise in providing services. There are server problems in other places, but not in our office. Elsewhere the whole month of December could not work due to online problems. We had some problems here in early November. The server problem was later resolved by talking to UNO. So, we can do a lot of good work this month. The cost of the service is very low and, in this case, follows the citizen's charter. How much will be charged for any service that is defined as charted? It does not take more than prescribed citizen charters. She said,

"I am very satisfied to be able to provide service here. Even the service charge is 10 or 20 TK in some cases which would have been 50 Tk if taken from outside. It costs 50 Tk to apply for a small application for an outside shop, but we have 20 to 30 Tk here."

And the service is provided immediately. The previous secretary had less computer knowledge so he had to depend on the entrepreneur. People get all the services, so they don't have to be harassed for anything.

Case 1 express some noteworthy issues like the general people are unaware, UDC officials have less computer knowledge, online problems. To run getting better service, there has no enough equipment or sufficient employee. But here, the cost of the service is very low and the general people do not face any harassment for any e-services.

Case 2: Md. Sajal Kundo (pseudonym) is 45-year-old Union Officials (UDC). As a Union Officials, he has many responsibilities in the UP office. Citizens ought to visit more times in the office to get e-service like to know the application procedure, accumulate the necessary information, make out their job rank, and collecting finishing the document. He talks about those citizens who had to stay several times in the office and wait until the work is complete. Our working platforms are very narrow. No broad workspace. Lack of sufficient trained manpower, citizen's demand is more than the supplier. For these reasons, sometimes citizens wait the afternoon to get service. People had to stay for hours due of officials are not available for the service and they are always being busy. Only three computers cover the whole demands. Sometimes they arrogant behave to the citizens. There are feedback mechanisms that are not better level. E-Service is provided fruitfully due to server problems. There are existed low speeds in website; nonetheless, some respondents use the facilities very well.

A lot of people are looking for services, but the table is just three. We have to do the work because we don't have the sufficient manpower of the local government. Moreover, there is a problem with the server. Many do not understand e-service. In this case, we have to give economic cooperation. I would be satisfied if the device was updated. He stated that ***"I have been doing the same job for 12 years, but no training"***. We are insulted by the public for providing low-quality services at the lowest level, but those at the upper level only set the policy. Our broadband line was cut four months ago today, not repaired yet.

Case 2 shows some noteworthy issues like the waiting time, low speed of service delivery, and the feedback system are not easier. In general, the greater parts of the respondents have to visit 3-4 times for taking one service. For getting improved service, they have no sufficient funds. The inadequacy of the funds could not support the difficulty.

Case 3: Md. Aminul (pseudonym) is a 60-year-old entrepreneur who lives in this union area. He was the main source of income for his families with five members include his three children and his wife. His daughter will be admitted to the fifth class after passing the fourth class. But now he wants to be admitted his daughter to a government school. This requires a proper birth registration card. So, he went to the union council office and filled out the application form. To fulfill the form, Jannat Akhter wrote the name of his daughter. They told me everything is acceptable, but after a few days, they informed me more documents are essential. When the officers checked the document, he saw Sravanti written on the child's card. So this application was not accepted. One of his relatives said less change has taken while the final paper submitted. After correcting it after 3 days, he gave the birth registration. When they didn't effort after that I came into the office. They said that many files have to seek out. Except paid, they are not to be pleased. Officials said everything ran according to the process. Nevertheless, there is a shocking experience. He opined that *“still now mass people are sufferings in various causes. Officials should block any unfair registration from the early stage that might stop to public sufferings”*.

Case 3 reviews the administrative culture and organizational setup. In this regard, there is seen intra organizational coordination or transformation of documents. Due to the narrow work scope in the office, the officials don't manage properly and there is a lack of administrative setup. For that reason, e-governance services are not perfuming smoothly. If they perform the first work genuinely, still these problems cannot be raised. She informs that she also asked the officials or staff to show her the daughter's documents. These officials should check the document of the child chard. Before checking the documents, then it might prevent such problems.

Case 4: Mr. Karim (pseudonym) is a 50-year-old and is a permanent resident of Jagannathpur Union. A few years ago, he bought a portion of land from his neighbor and his name is Motaleb Khan. Nevertheless, while Karim applies for the renovation of land, he found his application was discarded and mentioned that there is an inconsistency of the name of the ownership of land in the evidence. Karim was extremely disappointed with the negative response to his mutation case. Although it revealed the registered deed of land is to transfer, but, the name of the supplier was mentioned Motaleb Khan. However, in the previous record, according to the Khatian, the landlord is Motaleb Khan. As a result, it creates uncertainty regarding authentic ownership because the name of the seller does not contest. In these circumstances, Karim can't sell this land as the name of evidence is dissimilar. At last, he managed everything's as he is the real owner with the support of Union. Mr. Karim got to relax after managing the accurate registration deed, and which had been implemented online based. He spends energy and money to solve the problem.

Although it revealed the registered deed of land is to transfer, Case 4 reviews the mistakes of land registration and transformation documents. Though the main responsibility goes to the buyer in examination the facts are correct. Maybe the officials ought to help them avoid the mistakes. Moreover, E-Governance plays a very important role in arranging the registration deed to stop mistakes similar to this case and avoid the awful consequences.

Case 5: Moriom (pseudonym) is 35 years old and she is a housewife. She stays in Jagannathpur Cumilla. Recently she faced problems. She will go abroad, but there is a problem with the name. She said one application of mine was rejected by the officials due to mistakes. National Id card name and Birth Certificate name are not marched. I go to the Union Office for solving the problems. The officials were puzzled and said he will check the files. I called him again and again and asked to update him immediately. But he cannot provide the reason for the delay. She is not responding instantly to some slight reasons and he advised me to reapply the next time then it will be approved next time. For this reason, I paid 200 TK for this service and solve the problem in 10 days. So, I think that “the social and political position is very important matters in getting service speedily”. She asked the officials how it could be corrected. She also requested him to inform the matter details. Administrative culture is not highly inclusive in nature. There is the exit of the traditions of “Tadbir” because the powerful get different services easily because of their connection to the power source. But disadvantaged and poor people are paying more because of the “Tadbir” culture and lack of connection. Sometimes we are meeting the terms of suffering.

In Case 5 some significant issues are views and observed. Initially, the deficient of consciousness of the mass people are to blame for these consequences. She didn't validate the documents. Furthermore, he has lacked sufficient knowledge and if firstly she checked the documents, then he might not be falling in trouble with this problem. Secondly, the officials are likely to be delay, lack accuracy and they do not justify the document properly and poor administrative culture. There is existed “Tadbir culture” and services vary persons to persons.

Case 6: Mijanur Rahman (pseudonym) is 52 years old and is a Chairperson of the Union Office. The manpower of the union Parishad is inadequate to maintain & operate websites. The total personnel of this office are few, while officials have no training to operating and maintenance of ICT. ICT-based equipment or system is not updated properly. In the offices, most of the service options are online-based, but it does not function correctly. There is no strong searchable database and necessary software to update it. The human resource is not satisfactory to manage and retain E-Governance. Administrative setup is not well like internet & other infrastructural facilities are inadequate and generally supervise locally. So, an amalgamation of electronic processing and the manual system is concerned to supply facilities to citizens.

There is low-speed internet connectivity in the Union office. He also said some DC offices are connected to internet service at own management through a somewhat high-speed connection. But local level offices are planned to high-speed internet connectivity under IT project. In these cases, proper planning is extremely very important to make sure sustainable and high internet connectivity to local offices. Due to COVID 19 crisis, the delivery of services is turned online-based. This indicates the advanced level of E-service and the organizational culture are integrative. Still, E-Governance facilitates are rising. Thus, the government should be able to have the funds for ICT facilities so that the office is available with cost-effective service and E-Government can bring about the desired result.

Case-6 reviews some noteworthy issues like the lack of training officials, lack of ICT equipment or system is not updated, poor internet connections and low speed of service delivery. The financial support and the infrastructural facilities are inadequate.

6. Condensed Findings of the Study

Some of the key findings of the study are:

- **Lack of official's IT knowledge:** The employees are not trained properly about IT skills. The staffs also have not excellent knowledge about online or e-service and virtual work.
- **Online/ server problems:** Most of the Unions face IT problems in the service delivery process as well as keep the low speed of service delivery
- **Lack of necessary equipment:** There are no sufficient tools, equipment, and facilities regarding e-service delivery and to maintain quality services and during a time of crisis.

- **Lack of sufficient employee:** Lack of sufficient employee: There is a lack of adequate personnel and they take workload pressure and occurred to delays delivery of the quality of the services. Furthermore, skilled and energetic personnel are needed to provide quality services always
- **Culture of waiting:** Usually, the greater parts of the people have to visit 3-4 times for taking one service.
- **Lack of training:** The staffs have not proper training to develop IT skills and handle digital IT systems efficiently to supply services to the citizens.
- **Lack of sufficient funds:** The organization cannot fulfill the public's demands lack of funds. The inadequacy of the funds could not support the difficulty.
- **Lack of administrative set up:** The organizations have not proper logistical support to ensure e-service and lack of congenial work environment for the officials. They take extra stress and they are lacking eagerness.
- **The deficient of consciousness of the mass people:** The general people are not aware of e-service facilities, citizens go to the Union Parishad when they face any problems and they are not aware of the citizen charter and not concern about other service charges.
- **Poor administrative culture:** Sometimes the officials do not justify the document properly. There are also existing Adair cultures and service varies from person to person.

7. Recommendations and Conclusions

Based on findings the following recommendations are put for the suitable performance of E-Governance in Bangladesh.

- Update online application system with full-fledged automation.
- Develop an administrative culture and ICT infrastructure to connect all e-facilitating and provide low cost with high internet speed to access data.
- Union offices required sufficient networking system and materials like computer
- All electronics devices in keeping up-to-date.
- Arranging proper training programs for the officials and staff to improve ICT skills.
- Raising consciousness among general people to improve their knowledge and duty.
- To maintain change management by proper leadership with managing financial support and it reduces service delivery difficulty.

At present major government offices are running based on national web portals so that common citizens can access e-service delivery. In local level offices, it would be ensured while citizens would receive faster service. E-Service facilities are boundless which brings various fundamental changes regarding government service delivery. In Bangladesh, the E-Governance sector has also been flourishing in bringing innovative change regarding falling number of unrestricted influence of officials, bother and

corruption; make sure accountability and progress on the whole service delivery procedure. The study also highlighted a number of factors to measure citizen satisfaction with online service delivery at local government institutions. The study examines the relationship between citizen satisfaction and the provision of online services in the context of local government institutions. Overall, the study found that the level of citizens' satisfaction was not adequate due to lack of official's IT knowledge, server problems, low speed of service delivery, lack of necessary equipment, lack of sufficient employee, lack of training, lack of sufficient funds, lack of administrative setup, deficient of consciousness of the mass people, poor administrative culture. Consequently, delivery services are no more efficient. Moreover, the respondents are not pretty more satisfied with the overall performance of the e-service delivery. However, the government needs to be developed E-Systems into the service delivery process with a view to increasing the speed of service delivery and monitoring the activities. Therefore, local government institutions should also provide adequate tools, equipment, and facilities for the provision of quality services.

Authorship

Md. Foyjul- Islam and Rajib Chandra Das were responsible for data collection and analyses. Jannatul Ferdous led manuscript preparation and all authors contributed to manuscript drafting.

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Declaration of conflicting interests

The authors declare no conflicting interests.

References

- Chen, Y. C., Hu, L. T., Tseng, K. C., Juang, W. J., & Chang, C. K. (2019). Cross-boundary e-government systems: Determinants of performance. *Government Information Quarterly*, 36(3), 449-459.
- Hoque, M. R., & Sorwar, G. (2015). ICT Based e-Government Services for Rural Development: A Study of Union Information and Service Center (UISC) in Bangladesh. *The Electronic Journal of Information Systems in Developing Countries*, 71(1), 1-19.

- Isaac, W. C. (2007). *Performance measurement for the e-Government initiatives: A comparative study*. Nova Southeastern University.
- Kim, C. K. (2007). A cross-national analysis of global E-government. *Public Organization Review*, 7(4), 317-329.
- Mishra, S. S., & Geleta, A. T. (2020). Can an E-Government System Ensure Citizens' Satisfaction without Service Delivery?. *International Journal of Public Administration*, 43(3), 242-252.
- Saha P., Nath A., Salehi-Sangari E. (2010) Success of Government E-Service Delivery: Does Satisfaction Matter?. In: Wimmer M.A., Chappelet J.L., Janssen M., Scholl H.J. (eds) Electronic Government. EGOV 2010. Lecture Notes in Computer Science, vol 6228. Springer, Berlin, Heidelberg.
- Suri, P. K. & Sushil (2017). *Measuring E-Governance Performance*. In *Strategic Planning and Implementation of E-Governance* (pp. 25-39). Springer, Singapore.
- Teo, T. S., Srivastava, S. C., & Jiang, L. (2008). Trust and electronic government success: An empirical study. *Journal of Management Information Systems*, 25(3), 99-132.
- Yang, K., & Rho, S.-Y. (2007). E-Government for Better Performance: Promises, Realities, and Challenges. *International Journal of Public Administration*, 30(11), 1197-1217. doi:10.1080/01900690701225556
- Zaman, H. (2015). Service delivery process innovation: insights from Digital Bangladesh. *Innovation and Development*, 5(1), 165-168.

UNEQUAL ACCESS TO HEALTH CARE FACILITIES AND ITS IMPACT ON ACHIEVING SUSTAINABLE DEVELOPMENT GOALS: BANGLADESH PERSPECTIVE

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Abstract: *This article aims to explain how unequal health opportunities influence the development visions of a developing economy. By employing 20 years of panel data, ordinary regression, and trend analysis, the impact of unequal access to health facilities on Sustainable development Goals (SDGs) has been explained. The empirical findings confirm that discriminatory public health opportunities highly shape the agenda-2030. The higher out-of-pocket expenditures (amount people spend on health care with their household's ability to pay) contribute to financial hardship for individuals and widen inequality in access to health care. The shortage of qualified health care providers and their unequal distributions across regions force poor people to seek services from nonqualified traditional providers. The Poor- non-poor and rural-urban disparity in access to essential health care services is also acute here in Bangladesh. In health care financing, more than 70% of costs are out-of-pocket, and it pushes a massive number of people under the poverty line every year. The associations between good health & well-being and other sustainable development goals are robust. The inability to guarantee equal public health opportunities for all profoundly impede a nation's vision to promote a peaceful and prosperous society by ending poverty, malnutrition, and stunting. Conversely, securing fairness in attaining universal health coverage and quality health care for walks of people expedites a country's vision to build a just and flourishing society.*

Keywords: *SDG-3, Agenda-2030, Inequality of Opportunity (IoP), Universal Health Coverage (UHC), Out-of-Pocket (OOP) expenditure.*

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Introduction

From the beginning of civilization, everyone (from butcher to pope) searched for a better way of life. In every society, people, irrespective of their class, status, character, and religion, try to have a standard of living. In this viewpoint, the concept of "development" is biblical, and the process is contentious that possesses so many dimensions with challenges. Sustainability is one of the fundamental and inherent dimensions of development that world leaders have emphasized for the last few decades. In this context, United Nations (UN) has taken a world transformative agenda (Agenda-2030) for its countries to transpose the planet into a peaceful and prosperous one. It focuses on the principle of economic, social, and environmental development (Hosseinpoor, Bergen, Schlotheuber & Grove, 2018), which contains 17 goals and 169 targets, representing a globally shared vision and an outline for future generations (Morton et al., 2017)

However, the moment while the Post Millennium Development Agenda (*SDGs*) introduced our beloved planet has already been divided into two segments the rich at the top and the poor at the bottom. The ever-historic level of discrepancies between societies is associated with diverse causations.

Unequal opportunities refer to the conditions of not being equivalent, especially in rank, rights, and privileges. It is perceived as a share of overall imbalance that derives from circumstances beyond an individual's authority, such as color, place of birth, gender, religion, parental education, caste, etc. (Choudhary, Muthukkumaran and Singh, 2019). The concept of inequality is highly interlinked with social justice, sustainability and exerts enormous impacts on development. The developed and developing nations of both worlds suffer from equal access to different opportunities.

The condition arises in such an extreme situation that it disrupts the long-standing societal harmony and coherence on a balanced development pathway. Unequal opportunities, especially in delivering quality health care service, have become one of the most appealing development challenges of our time. It does not compare with the definite developmental stage of an economy; the challenge is faced by all alike (World Social Report, 2020). As the SDGs are multifaceted and integrated, all other SDGs are massively impacted by unequal health opportunities. Though factors beyond an individual's control should not define one's possibilities to succeed in life, in reality, the world is far from addressing all people with the same opportunity to live a healthy and flourishing life.

The author in this paper would like to investigate how unequal opportunities in primary health care services retard a nation's development ambitions by impacting individual lives and exerting long-term effects on achieving different sustainable development goals. Bangladesh is determined to attain SDGs to end poverty and ensure peace and prosperity for all by 2030. In this regard, equal access to health is considered a fundamental human right for its citizen by the constitution of Bangladesh. It has made commendable progress in different socio-demographic indicators like life expectancy at birth, EPI coverage, maternal mortality and child health, fertility check, gender parity, HDI, gross enrolment, and literacy rate. According to sustainable development report-2021, Bangladesh faces critical challenges in reaching seven (7) sustainable development

goals out of seventeen (17), where promoting good health and well-being (goal: 3) is the most significant one that Bangladesh confront, along with SDG: 2, 6, 9, 11, 16, and 17. The report also mentions that though Bangladesh is moderately improving regarding SDG: 3, still major challenge remains in reducing maternal mortality and neonatal mortality, the incidence of tuberculosis, adolescent fertility, births attended by skilled health professionals, and universal health coverage make the spirit of achieving healthy lives and promoting well-being for all ages a difficult one ("Sustainable Development Report 2021", 2021). The SDGs require shared initiative across diverse stakeholders within and outside the health sector to accomplish progressions in the many conditions that impact the opportunity for health. Such as poverty, hunger, quality education, gender discrimination, decent work environment, women empowerment, clean energy, water and sanitation, disparity within and across countries, and above all, raising a healthy and flourishing world.

Scarcity of healthcare professionals, low density of physicians and nurses, the incongruity in their distribution across the country, uneven progress in various vital health indicators between the rich and the poor, and dominance of unqualified/traditional healers are the critical issues in our health sector. Besides inadequate health financing, high out-of-pocket expenses, the difference in health expenditure and its distribution by wealth status and locality, low government spending, and the rich-poor variations in exposition to health risks are well-known forms of disparity in the health system of the country.

The central focus of this research is the analysis of unequal access to health care facilities, and its impact on sustainable development has been measured by different conventional health indicators of Bangladesh. Correlation, regression, Ordinary Least Square (OLS), and usual trend analysis are run to have the impacts. To have the effects of the interactions, F-test were also conducted. The correlation symbolizes a solid assertive relationship ($r=0.93$) between public expenditure and Out-of-Pocket (OOP) spending on health care. That means the lower the government expenses to health, the higher the burden of private spending on people, ultimately lowering their access to Universal Health Coverage (UHC).

Statement of the Problem

Bangladesh has performed exceedingly well in different socio-demographic indicators in the last two decades, especially in health. From the beginning of its independence, the country has taken many initiatives, programs, policies and adopted goals regarding health and related facilities focusing on the problems of access, equity, and quality. Despite the priority accorded to health in the country's development strategy, the progress towards actualizing these goals has been slow, especially in terms of inclusiveness and quality. Though our health sector has successfully reduced child and maternal mortality, improving life expectancy, sanitation, and immunization, it is still limping in securing quality health facilities for all. According to Sachs et al. (2020), SDG 3 has been heightened irrationally based on the vaccination coverage and HIV infection. Bangladesh is in a discomfort zone in implementing SDG-3 and will not be able to meet the targets on time (Rahman, 2021).

Public financing in the health sector is very low, and *per capita*, health expenditure incurred by the government has become stagnant over time. As a result, mass people have to bear the considerable cost that makes them unable to access quality health services very often. Besides, the skilled workforce shortage in the health sector and its unequal spreading across countries make our objective to attain good health and happiness for all a challenging one. To ensure good health and well-being for all by promoting universal health coverage and quality health service by skilled health professionals, increasing health worker density and public health expenditure is still challenging. This paper will help us realize the kind of unequal opportunities predominating in health and how it will interrupt the way to achieve a post-millennium development agenda.

Methodology

To carry out research, applying a single method is not always sufficient. As different research styles and methodological tools apply to various research problems; therefore, qualitative analysis has been done in this research work based on quantifiable data collected mainly from secondary sources. By presenting data in nine figures and five tables, the results have been analyzed. Besides, qualitative analysis simple regression has also been run to estimate the robustness of the linear relationship between the dependent variable (*incidence of poverty*) and the independent variable (*out-of-pocket expenditure*).

Data

Secondary data, from a different reliable source such as the Bangladesh Bureau of Statistics (BBS), Bangladesh Health Watch Report-2018, Bangladesh Health System Review-2015, Demographic and Health Surveys (DHS)-2015, Bangladesh National Health Accounts 2015, Bangladesh Economic review Report 2019, Ministry Health and Family Welfare (MoHFW), Institute for Health Metrics and Evaluation (IHME), 2020 has been used. Articles from different journals, publications, reports, books, rules and regulations, websites, and web-based newspapers have been reviewed.

Limitations of the Study

The paper tries to endeavor an emerging and alarming social issue of time: the unequal opportunities in the health sector of Bangladesh. One of the most crucial constraints of this research paper is the lack of primary data. Moreover, we could not meet with beneficiaries, healthcare providers, and health experts due to the COVID-19 pandemic. Without the epidemic, we would interact with all the stakeholders, giving us a clearer picture of the issue.

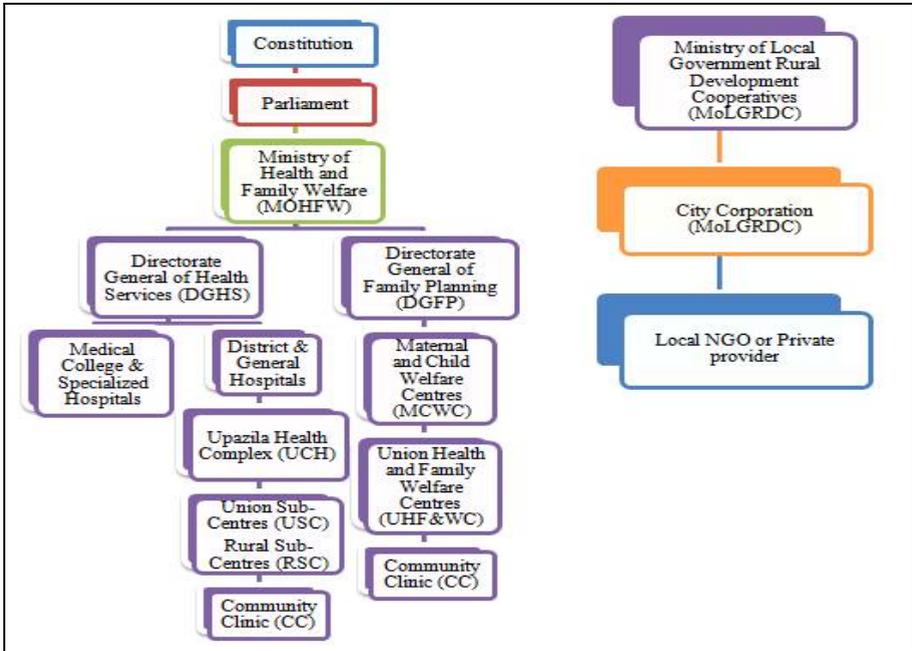
The Health and Structure of Health Care delivery system in Bangladesh

The World Health Organization (WHO) defines "health" as a state of complete physical, mental and social well-being (WHO, 1948). It is the source of all happiness and the fundamental right of all citizens of a country. According to the Constitution of Bangladesh (Article 15a), access to health is a fundamental right of all citizens. The state must take up practical steps "to guarantee uniform, mass-oriented and universal access to health for all age's people." The nation promises to make sure health and education as fundamental human rights have been re-affirmed through different world conferences.

To improve and sustain people's lives, tangibly, a sound health care system is mandatory. A robust health care delivery system is crucial for actual progress in disease control and ensuring health quality. A well-formatted health care delivery system with multiple layers exists in Bangladesh. The system is decentralized with Union Health and Family Welfare Centres (UHFWC) at Union (cluster of few villages) levels, primary health care provided in Upazila Health Complexes (UHC) at Upazila level, and Community Clinics (CC) at the village level.

In addition to that, the District Hospitals provide secondary care, and tertiary hospitals in various large urban areas provide specialized care and back the primary health care system. There are four key players in Bangladesh's pluralistic health care delivery system that define its composition and functions: the public, the private, the NGOs, and the donor agencies. The structure of the health care delivery system is grounded on sound policies embracing the whole area of services, and the government of Bangladesh always tries to create conditions whereby its citizens can avail the highest achievable health status.

Figure 1: Organizational Structure of Health Service Delivery Mechanism in Bangladesh



Source: Bangladesh Health System Review 2015

Table 1: Major Selected Socio-demographic Indicators of Bangladesh

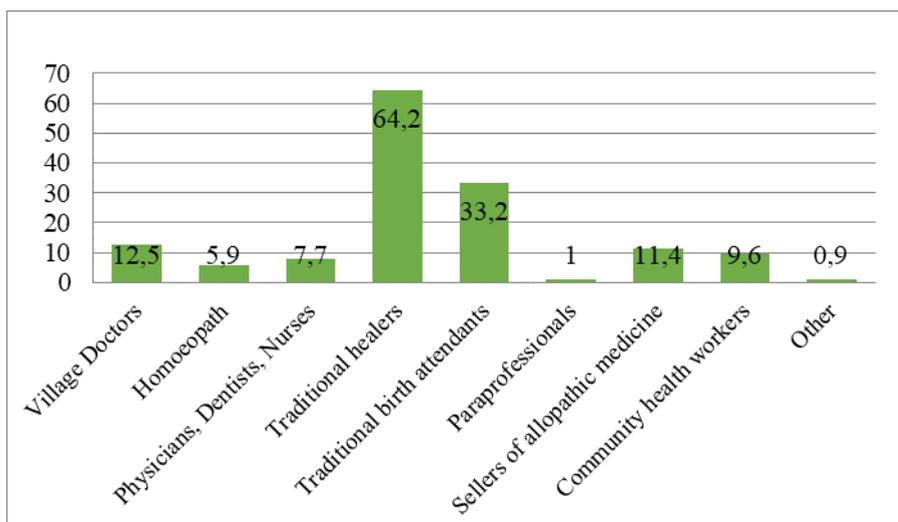
Subjects	Indicators	Values
Population	Population (in millions)	169.11 BBS
	Male- Female Ratio	100.2
	Population Density/Sq. Km	1140
	Crude Birth Rate/1,000 Population	18.1
	Crude Death Rate/1,000 Population	5.1
	Crude Disability Rate	8.5
	Infant Mortality Rate/(1000 Live Birth)	21
	Under 5 Mortality Rate(1000 Live Birth)	28
	Maternal Mortality Ratio/(1000 Live Birth)	1.65
	TFR/ Per Women (15-49)	2.04
	CPR (%)	63.9
	Child Underweight (0-59 Months)%	22
	Child Stunted (0-59 Months)%	31
	Child Wasting (0-59 Months)%	18
Life Expectancy	Male	71.2 Years
	Female	74.5 Years
Financial Indicators	GNI per Capita—US\$	2227
	PPP GNI per capita—US\$	5200
	Average growth rate (last 20 years) at a constant price (%)	6.27
Health Care Facilities	Union Level Sub-centres (including OPD)	1304
	Upazila Level Hospitals(including Upozila Health Office+ Thana Health Centre)	522
	Secondary and Tertiary Hospitals	127
	Medical Colleges	37
	Disease(Infectious) Control Centers	5
	Specialized Hospitals	35
Health Care Providers	Community Clinics	13,907ER
	Total Registered Health Providers	85,633
	Total Registered Nurses	48,001
	Medical technologists (per 10,000 populations)	0.32
	Medical assistants (per 10,000 populations)	
Health services	Community & Domiciliary staff (per 10,000 populations)	2.13
	Persons/Physician	1:1724
	People/Bed in Hospital	1195
	Doctors/10,000 population	5.80
	Improved Drinking Water Coverage (%), (tube-well)	98.3
	Improved Sanitation facility (%)	81.5
Financing Health Care	Fully Vaccinated EPI Coverage (%)	86
	GDP spent on healthcare	3.1
	Health expenditure as a % government budget	4.9
	Out-of-pocket expenditure for health	74
	Per capita total expenditure on health (U.S.\$)	37
	Contribution Development Partners	6%

Sources: *Sample Vital Statistics Report 2020 (BANGLADESH BUREAU OF STATISTICS, 2021), Bangladesh Economic Review Report 2021 (Ministry of Finance, Peoples Republic of Bangladesh, 2021), Ministry of Health and Family Welfare Report 2018*

Health Service Provider's Density in Bangladesh

Along with socioeconomic and environmental factors, health workers are the critical restrictive issue shaping the population health, and Bangladesh is well-known as a country with severe health professional shortages (Ahmed, Hossain, RajaChowdhury & Bhuiya, 2011). In health care delivery systems, the workforce serves as doorkeepers and pathfinders for the efficient application of all other resources. The scarcity of competent health care providers, especially in lower-middle-income countries like Bangladesh, has got much concentration at present as it acutely intimidates the accomplishment of sustainable development goals. Having the shortage of provision of trained health professionals, the poor and the deprived people in Bangladesh search for health care from the nonqualified traditional providers. Compared to contemporary developing countries, the quality of average health care services is deficient in Bangladesh due to poor health consciousness, predominantly on the demand side.

Figure 2: Health service Provider's Density/10.000 Population



Source: Author's compilation from Bangladesh Health Watch Report 2016.

Unequal Distribution of Health Professionals in Bangladesh

Bangladesh is a country confronting with severe human resource crisis for health care services (World Health Organization, 2006). There are only two nurses and five doctors per 10,000 population, and the doctor-nurse ratio is only 0.4. The significant discrepancy in the density of different healthcare providers is also observed in all eight divisions. Dhaka division enjoys the highest density of doctors followed by Chottogram, but this movement is just the reverse for nurses. In urban areas, a

considerable imbalance in density was also observed, especially for the doctors. Likewise, there is also a higher dissimilarity in the male-female ratio, supporting males in the case of doctors (4 males to 1 female) and females in the case of nurses (9 females to 1 male). In total, only 7.7 skill health professionals per 10,000 people officially.

Table 2. Disparity in Distribution of Health Care Professionals (HCP)/10,000 Population

Divisions	Doctors	Nurses	Dentists	Total	Nurse per Doctor
Barisal	1.7	0.9	0.3	3.08	0.5
Chottogram	4.8	3.6	0.3	8.8	0.7
Dhaka	10.8	2.8	0.5	14.2	0.2
Khulna	1.3	1.9	0.05	3.3	1.4
Rajshahi	2.1	1.1	0	3.2	0.5
Sylhet	2.2	0.4	0	3.2	0.1
Area					
Rural	1.1	0.8	0.08	2.1	0.7
Urban	18.2	5.8	0.8	24.9	0.3
Sex					
Male	4.5	0.2	0.2	5	0.05
Female	0.8	1.8	0.03	2.7	2.1
All	5.4	2.1	0.3	7.7	0.4

Source: Author compilation of Distribution of Health Care Professionals (HCP) (Ahmed et al., 2013)

Inequality in health and related indicators across various wealth quintiles and region is usually massive in Bangladesh. Though overall disparity in under-five mortality rates between different wealth quintiles has been falling, it persists between rural and urban areas to a large extent. The variation in the under-five mortality rate and institutional delivery between the lowest and highest income quintiles is relatively high. However, the poor versus non-poor disparity in family planning and immunization is not that severe.

Table 3: Inequality in Fundamental Health Indicators by Wealth Quintile

	Poorest	Second	Third	Fourth	Richest
Under-five mortality rate(U5M)	61.6	60.3	55.2	51.1	37.1
Family Planning (FP)	82.7	85.6	83.9	82.5	84.7
Full Immunization	69.4	83.4	87.2	89.7	91.9
Institutional Delivery	14.9	24.2	34.1	46.3	70.9

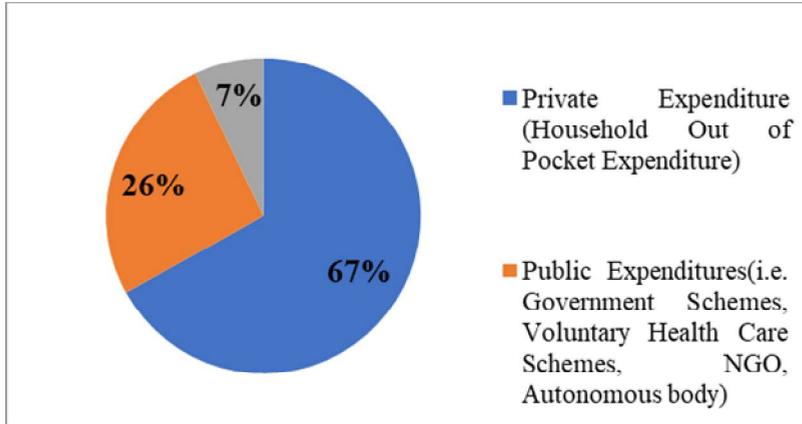
Source: Authors Compilation of Demographic and Health Surveys (DHS), Data-2017-18

The Disparity in Health Service Financing

Public spending on health care services in Bangladesh as a percentage of GDP is the lowest globally. In 2015, overall health outflow (both private and public) was 3.0% of GDP, the lowest in South Asia and below the average of lower-middle-income countries (5 percent). In total health spending, government expenditure (combined with voluntary schemes, NGOs, and Autonomous bodies) is only 26% and has been stagnant at around 0.8-0.1 percent of GDP over the last 15 years. In health care, private expenditure in the percentage of GDP is substantially large and increasing day by day. In 2015, personal health expense was 67% of total health expenditure, whereas, for the government, it was only 26%. Therefore, here in Bangladesh, mass people have to bear the massive burden of health expenditures. In these conditions, mass people, especially the poor and underprivileged, fail to ensure their basic health amenities.

In recent times the OOP shows an increasing trend. Most OOP spending includes the provision of care by private providers, with almost 42 % going to medicine retailers, 11% to ambulatory providers, 10% to private hospitals, and a diverse range of medical providers. Of course, this low government spending on health poses a challenge to attaining the universal health coverage that Bangladesh wants to achieve by 2030 would remain a dream unless public expenditure on health care service is substantially increased immediately.

Figure 3: Total Health Expenditure (THE) Financing by Source



Source: Authors Compilation from Bangladesh National Health Accounts Reports 1997-2015.

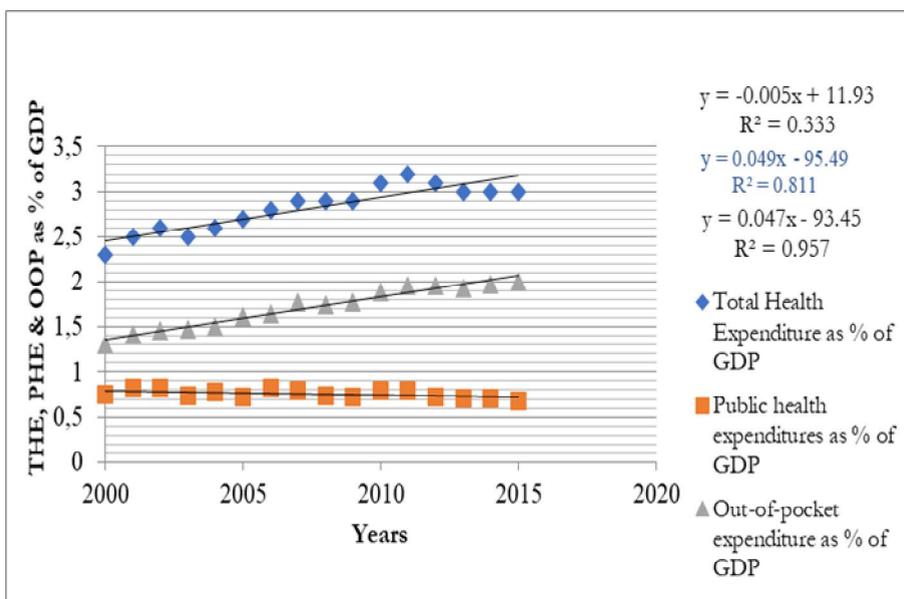
Per Capita GDP and the Trends of Different Health Expenditure as % of GDP

From appendix B, we find a definite relationship between "Public Health Expenditure (PHE)" and "Out of Pocket (OOP)" expenditure of the last 15 years. The r-value ($r =$

0.88) indicates that the correlation between public health expenditures and Out of Pocket (OOP) expenditure as a share of total health expenses is robust. In addition to that, we observe that Bangladesh has made excellent advancements in increasing per capita income. In 2020 it's per capita income reached \$2,064 per person (BBS, 2020) whereas, in 2000, it was \$417 only. The size of GDP has also increased by 6.57 times last 20 years (in 2000, it was only \$53,000 million to \$ 347,991 million in 2020), and so has its per capita health expenditure (from \$10 to \$ 37 over the period).

Though overall expenditure on health in Bangladesh has increased, it has remained stagnant about 3% over the period as a percentage of GDP. Among this 3% of expenditure, the share of public health expenditure displays a decreasing drift while the proportion of OOP expenditure shows an increasing trend as an ultimate result. It is evident from the figure-4 that the lower amount a government pays out on health, the higher will be the out-of-pocket expenses. According to the 'Global Monitoring Report on Financial Protection in Health 2019', about 7.0% of households in Bangladesh are hard-pressed into poverty every year as an outcome of high out-of-pocket payments on health. So, the tendency of less government health expenditure and higher OOP imposes severe challenges towards achieving SDGs. Because low public spending necessitates a clear trend of higher out-of-pocket payment which results in greater socioeconomic inequality.

Figure 4: Trends of Total Health Expenditure (THE), Out of Pocket (OOP) and Public Health Expenditure (PHE) as % of GDP

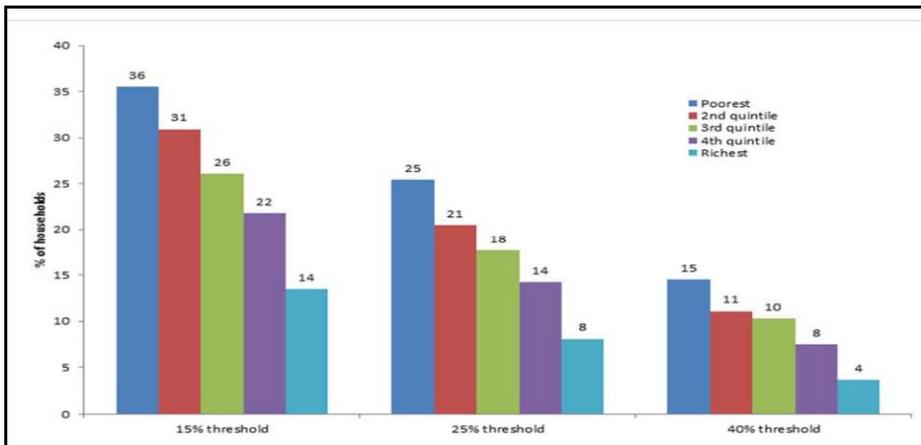


Source: Authors Compilation from Bangladesh National Health Accounts Reports 1997-2015

Differences in Health Expenditure by Wealth Status

Health expenditure consists of a comprehensive range of fees, charges, and costs (i.e., consultation fees, cost of tests, travels, drugs, and admission charges). In Bangladesh, health well-being expense is a much more delicate issue for victims of their poor income. Because private outflow forces an excessively higher burden on the poor than the non-poor, since people are uncertain about when they become unwell and how much it will cost, the means for pooling and risk-sharing are imperative. A recent study by (Khan et al., 2017) represents the prevalence and concentration of household catastrophic health spending in Bangladesh at 15%, 25%, and 40 % by quintile. It reveals that the destitute are the worst sufferer by OOP health expenditures at all thresholds. The disproportionately large OOP expenditure also restrains the health financing system from performing the key social redistribution role from the better off to the poor. As a result, people fail to access health facilities properly.

Figure 5: Proportion of Households with Catastrophic Health Expenditures by Quintile

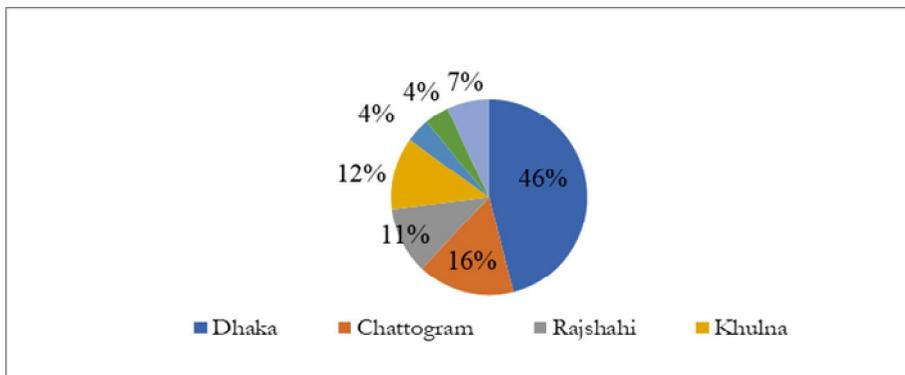


Source: Author's Compilation of Households with Catastrophic Health Expenditure: Source: Khan et al., 2018

Unequal Distribution of Total Health Expenditure (PHE) and Per Capita Health Expenditure (PHE) among Divisions

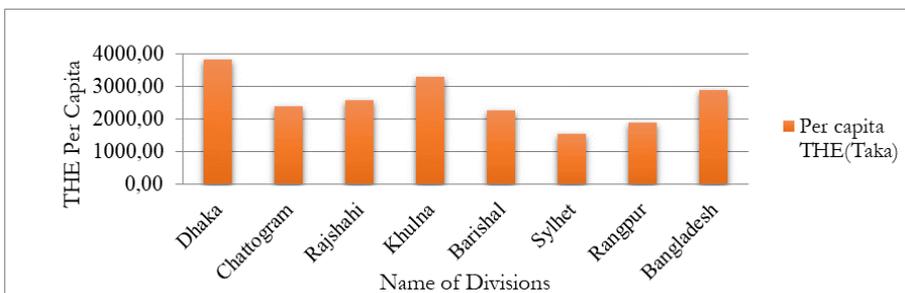
Through careful observation of figures 6 and 7, the distribution of Total Health Expenditure (THE) and Per-capita Health Expenditure (PHE) are uneven across eight divisions of the country. The Dhaka division enjoys the highest percentage of THE, followed by Chottogram, Khulna, and Rajshahi.

Figure 6: Share of Total health Expenditure by Division, 2015



Source: Authors Compilation from Bangladesh National Health Accounts Reports 1997-2015

Figure 7: Total Health Expenditure Per capita (Taka) by Divisions

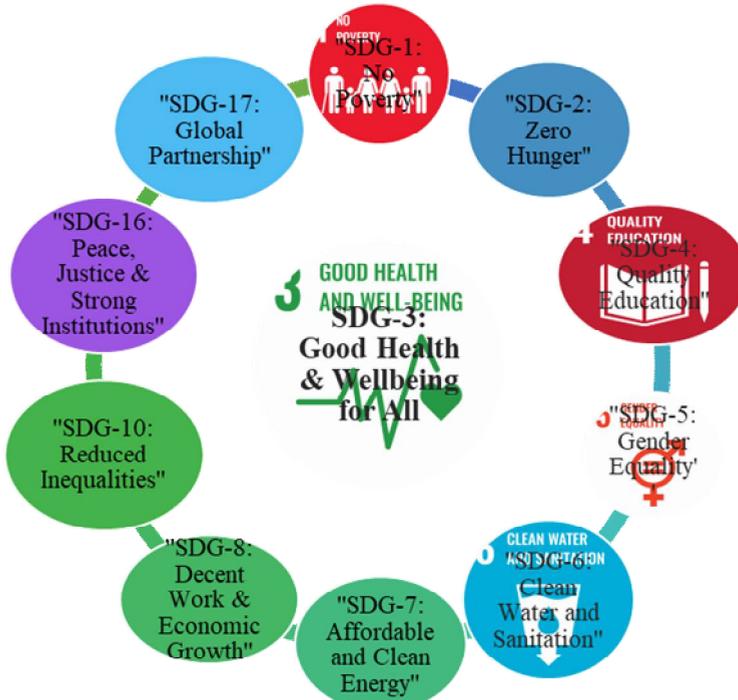


Source: Authors Compilation from Bangladesh National Health Accounts Reports 1997-2015.

Unequal Opportunities in Health and It's Impacting Other SDGs

The link between inequality of opportunity in health and other SDGs is meaningful. As fundamental human rights, health has qualitative and far-reaching impacts on almost all other sustainable goals. In this perspective, without addressing existing imbalances regarding ensuring healthy lives and qualitative education for all walks of people, achieving SDGs is a daydream. The ways disparities towards access to inclusive, equitable education and good health in Bangladesh impact its sustainable development ambitions are given below:

Figure 8: Other SDGs that are Impacted by Good Health and Wellbeing (SDG-3)



Source: Author's Compilation by using Targets and Goals of SDGs; ("THE 17 GOALS | Sustainable Development", 2021)

The overarching theme of "Good Health and Wellbeing" (SDG-3) is "no one will be left behind" has an enormous impact on different goals of sustainable development. From "Appendix C," we find that SDG-3 highly influences SDG-1, 2, 4, 5, 6, 7, 8, 10, 16, and 17. Health and poverty are connected in a fortifying manner. As the poor are less nourished and less informed, they are exposed to greater risks and less able to access healthcare facilities than the wealthy. Consequently, they have a hovering risk of sickness and feebleness.

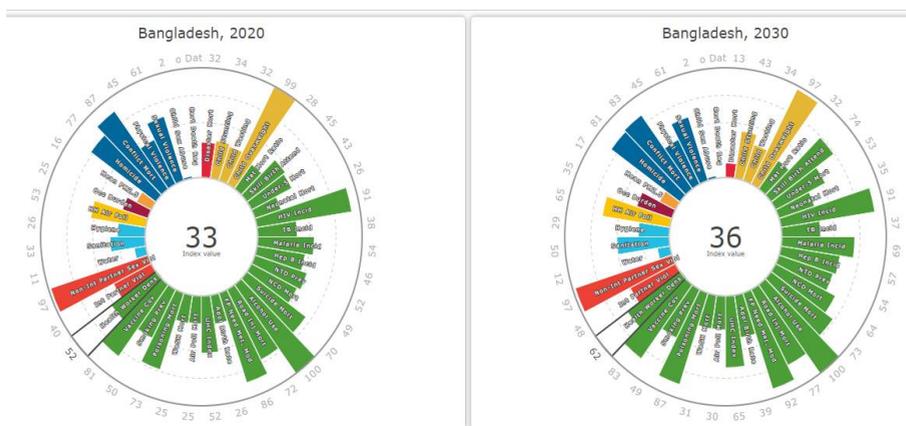
On the other hand, diseases shrink households' savings, reduce understanding capacity, trim down competency, and weaken the standard of living, thereby perpetuating poverty (WHO, 2016). A considerable segment of the people in Bangladesh fails to maintain their health expenditure and nutrition as the incidence of poverty is very high. Poverty creates powerlessness and poor health condition, as lousy health raises poverty. On the other hand, improving health conditions increase income-earning potentials and eliminate discrimination against disadvantaged groups, directly enhancing their well-being and enabling them to earn more (Oxford University Press, 2001). So,

undoubtedly poverty is a vital hurdle for guaranteeing good health and well-being to the people in Bangladesh as it restrains people's spending ability on health (Rahman et al., 2005).

A nation's objective of building poverty, hunger, and disparity-free, just, equal, and peaceful society can hardly imagine without ensuring access to good health. To secure universal health coverage and quality health care, all forms of malnutrition, including stunting, wasting and overweight, and violence against women and girls, must end. Besides, ensuring safe, affordable, and equitable access to water, sanitation, and reliable modern energy, protecting labor rights, and securing a safe working environment is imperative to extend life expectancy. It is also evident that if we cannot ensure equal access to health care and related facilities for all, our productivity will be low. Low productivity ultimately leads to low income, and people with less purchasing power are highly exposed to poverty, hunger, malnutrition, violence, and low-quality education. An individual burdened with poverty, hunger, malnutrition, disparities, and illiteracy usually has less opportunity to think of other critical aspects of SDGs like climate action, biodiversity, research and innovation, sensible consumption, resilient cities, and global partnerships. Though Bangladesh has ranked 109 among 193 UN countries having an overall SDG index value of 63.5 among 100, it has scored only 33 among 100 in the case of *health and health-related index* value. From projected data, we find that for health and other SDG targets related to health, we will likely score 36 by 2030, where most of the targets will remain unmet.

So, health has an intergenerational impact towards achieving SDGs, which rotate cyclically. Thus, neglecting any of these fundamental issues will ultimately lead our aspiration to achieve agenda-2030 in vain.

Figure 9: Present and Projected Score of Bangladesh in Terms of Sustainable Development



Source: Author Compilation by using Institute for Health Metrics and Evaluation (IHME), 2020 Data, ("Health-related SDGs | IHME Viz Hub," 2021)

Conclusion and recommendations

Previously, it has been considered that inequality is a routine procedure on the development process, especially among the Kuznets followers. Later on, it was proven wrong, and many countries of the world have successfully reached a higher growth path without accelerating inequality. Inequality of opportunities ultimately leads to unequal outcomes and erodes social harmony. So sustainability is the most crucial aspect of development ambitions, especially in developing countries like Bangladesh. It is vital to fulfilling the core values and inherent objectives of development. Without sustainability, the fundamental objectives of development (*sustenance, self-esteem, and freedom of choice*) will not be achieved. In this respect, exploring the relationship between sustainable development and unequal opportunities is vital because it creates substantial imbalances in a society with considerable impacts on sustainability.

From our discussion, the existence of significant unequal opportunities in our country's health sector is quite self-evident. Though Bangladesh has made extraordinary improvements in different socio-demographic indicators, unequal access to overall health care facilities is still extensive and tenacious. It faces severe constraints in ensuring good health and well-being for all of its citizens. The shortage of skilled health care providers, the disparity in health workers distribution (male-female, rural-urban), low density of doctor-nurse ratio are pretty usual. We observe mentionable differences in fundamental health indicators (maternal mortality, family planning, and immunization) and per capita health expenditure of households by wealth status. In addition to that, government health expenditure is still deficient compared to developed countries. Public health expenditure has been moving around 2-3% of the GDP, and the poor and the rich simultaneously benefit from it. As the poor are much more vulnerable to catastrophic health hazards than the wealthy, they demand special attention in health spending so that the poor can benefit more from it and their out-of-pocket expenditure reduces substantially.

We also notice a robust and assertive correlation between sound health to poverty and their consequences on SDGs. The higher the attainment of an individual's health status, the lower the incidence of poverty. As the private expenditure on health is very high compared to public spending, it exerts a tremendous barrier, especially to the poor, by gradually placing them in a lower cohort of income status. The inability to access quality health care services brings impoverishment by lowering an individual's competency and productivity. Similarly, suppose a person is exposed to malnutrition and health hazards and lives with disabilities for a more extended period. In that case, his productivity must be lower, ultimately leading to a lower segment of income status.

Policy Initiative of Good Health and Wellbeing

The government has been implementing different programs in the health sector to improve the living standards of all citizens by undertaking impressive pro-people policy initiatives. The core objective of sustainable development is to free humankind from the severity of poverty, hunger, malnutrition, illiteracy and protect our beloved planet from all sorts of depravity. Though Bangladesh has made remarkable progress in the

health sector due to various activities, mass people fail to harvest its actual benefits for prevailing inequality in different forms. We must extirpate all kinds of disparities related to various opportunities to reap tangible benefits from the development. The rural-urban gap in access to different health care services also is removed in this response. To minimize the out-of-pocket (OOP) expenditure, especially the poor, we must focus on them. If the rich take the same advantage as the poor from the public health expenditure, the gap will never be minimized. Benefit incidence analysis can be done to have a clear picture of government health expenditure. As the number of the aging population is growing high with the incremental life expectancy, the government should have a distinct view regarding their old age safety and welfare.

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Declaration of conflicting interests

I declare, on my own responsibility, that there is no conflict of interest in the production and publication of this article.

Appendix A – Per Capita THE, PHE, OOP as a Share of GDP & Total Expenditure

Year	Total GDP in USD (in Millions)	GDP Per capita (\$)	Total Health Expenditure (THE) in Current Price (Million Taka)	Total Health Expenditure (THE) as % of GDP	Public Health Expenditure (PHE) as % of THE	Out of Pocket (OOP) Expenditure as % of THE	Per Capita THE (\$)
2000	53000.00	417.00	63,008.00	2.30	32.7%	57.0%	10
2001	54000.00	414.00	72,030.00	2.50	32.6%	56.5%	10
2002	55000.00	413.00	81,559.00	2.60	31.8%	56.2%	11
2003	60000.00	446.00	87,882.00	2.50	29.2%	58.7%	11
2004	65000.00	475.00	100,456.00	2.60	30.2%	57.6%	12
2005	70000.00	501.00	115,399.00	2.70	26.8%	59.9%	14
2006	72000.00	511.00	137,114.00	2.80	29.2%	58.7%	15
2007	80000.00	560.00	156,977.00	2.90	27.2%	61.2%	16
2008	92000.00	638.00	181,775.00	2.90	25.5%	60.3%	18
2009	102000.00	706.00	207,671.00	2.90	25.0%	61.1%	21
2010	113000.00	768.00	246,040.00	3.10	25.7%	61.0%	24
2011	119000.00	801.00	288,806.00	3.20	24.7%	61.3%	25
2012	133000.00	889.00	323,437.00	3.10	23.1%	63.3%	27
2013	150000.00	982.00	353,960.00	3.00	23.8%	64.3%	29
2014	173000.00	1118.00	398,420.00	3.00	23.5%	65.6%	33
2015	195000.00	1245.00	451,889.00	3.00	22.7%	66.9%	37

Appendix B – The other Sustainable Development Goals and Targets along with “Goal-3 (Ensure Healthy Lives and Promote Well-being)” that are Impacted by Unequal Opportunities in Health

Sustainable Development Goals and Indicators Related to Health	Target	Achievement of Bangladesh in last 20 years					Projected Values	
		2000	2005	2010	2015	2020	2025	2030
"1.5.1 Death rate due to natural Disaster per 100000 people."	"By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters."	0.1	0.2	0.07	0.01	4.8	4.4	4.7
"2.2.1 Prevalence of stunting among	"By 2030, end all forms of malnutrition,	49.2%	43.8%	41.9%	39.9%	34.5%	35.3%	43.3%

Sustainable Development Goals and Indicators Related to Health	Target	Achievement of Bangladesh in last 20 years					Projected Values	
		2000	2005	2010	2015	2020	2025	2030
children under five years"	including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under five years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons."							
"2.2.a Prevalence of wasting among children under five years"	Do	13.3%	11.9%	12.7%	12.6%	12.3%	12.2%	12%
"2.2. b Prevalence of child overweight."	Do	3.3%	3%	3.7%	4.2%	4.7%	5.3%	5.9%
"3.1.1 Maternal mortality ratio"	"By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births."	323.7	286.9	223.9	175.7	150.4	134.6	123.7
"3.1.2 Coverage of skill birth attendance"	Do	11.6%	18.8%	33.8%	47.9%	58.8%	70.8%	80.3%
"3.2.1 Under-five mortality rate (probability of dying before the age of 5 years per 1000 live birth)"	"By 2030, end preventable deaths of newborns and children under five years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births."	85.8	67.4	51.5	37.8	28.4	22.7	18.6
"3.2.2 Neonatal mortality rate"	Do	42.5	36.5	29.9	23.5	18.5	15.5	13.2
"3.3.1 Age-standardized rate of new HIV infection (per 1,000)"	"By 2030, end the epidemics of AIDS."							
"3.3.2 Age-standardized rate of Tuberculosis cases (per 100,000)"	"By 2030, end the epidemics of tuberculosis."	183.4	149.7	126.7	127.5	129.9	132.6	135.9
"3.3.3 Age-standardized rate of epidemics of malaria."	"By 2030, end the epidemics of malaria."	8.1	6.2	2.1	0.3	0.05	0.01	0.0

Sustainable Development Goals and Indicators Related to Health	Target	Achievement of Bangladesh in last 20 years					Projected Values	
		2000	2005	2010	2015	2020	2025	2030
Malaria cases (per 100,000)"								
"3.3.4 Age-standardized rate of Hepatitis B incident cases (per 100,000)"	"By 2030 combat against hepatitis-B."	1797.3	1694.1	1670.8	1666.3	1516.6	1293.1	1114.1
"3.3.5 Age-standardized prevalence of 15 neglected tropical diseases (NTDs)"	"By 2030, end neglected tropical diseases."	42.3	44.2	47.6	50.3	53.2	54.4	54.2
"3.4.1 Death rate due to cardiovascular diseases, cancer, diabetes, and chronic respiratory diseases among population age 30 to 70 (per 100,000)"	"By 2030, reduce by one-third premature mortality from NCDs through prevention and treatment and promote mental health and well-being."	513.8	544.7	536.3	463.4	420.6	369.6	326.0
"3.4.2 Age-standardized death rate due to self-harm (per 100,000)"	Do	7.7	7.2	7.3	6.1	5.9	5.6	5.4
"3.5.2 Risk-weighted prevalence of alcohol consumption"	"Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol."	0.03%	0.3%	0.3%	0.3%	0.4%	0.4%	0.4%
"3.6.2 Age-standardized death rate due to self-harm (per 100,000)"	"By 2020, halve the number of global deaths and injuries from road traffic accidents."	7.1	10	9.9	8.7	7.8	7.1	6.6
"3.7.1 Proportion of women of reproductive age (15-49 years) who have their need for family planning met with modern contraception methods."	"By 2030, ensure universal access to sexual and reproductive healthcare services, including for family planning, information and education, and the integration of reproductive health into national strategies and programs."	65.2%	68.4%	71.9%	75.9%	78.9%	81.4%	83.6%
"3.8.1 Coverage of essential health services, as defined by the UHC service	"Achieve universal health coverage, including financial risk protection, access to	40.8	47.3	53.5	58.5	62.7	67.6	71.4

Sustainable Development Goals and Indicators Related to Health	Target	Achievement of Bangladesh in last 20 years					Projected Values	
		2000	2005	2010	2015	2020	2025	2030
coverage index."	quality essential healthcare services and access to safe, effective, quality and affordable essential medicines and vaccines for all."							
"3.9.1 Death rate attributable to air pollution and ambient air pollution (per 100,000)."	"By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water, and soil pollution and contamination."	132.7	128.8	122.2	98.3	88.2	80.4	73.8
"3.9.2 Death rate attributable to unsafe water, sanitation and hygiene (WaSH) (per 100,000)."	Do	85.9	56.4	39.1	32.1S	28.4	23.5	19.7
"3.9.3. The death rate due to unintentional poisonings (per 100,000)."	Do	0.3	0.4	0.5	0.4	0.3	0.2	0.2
"3.a.1 Prevalence of daily smoking among population ten years and older."	"Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate."	21.3	21.1	21.4	20.8	20.4	20.3	20.3
"3.b.1 Coverage of seven vaccines in target populations"	"Support the R&D of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines."	30%	41%	57.7%	75.5%	81.4%	82.5%	83.4%
"3.c.1 Health worker density(Physicians, Nurses, Midwives and Pharmacists per 1,000."	"Substantially increase health financing and the recruitment, development, training, and retention of the health workforce."	0.7	0.8	1	1.3	1.5	1.9	2.3

Sustainable Development Goals and Indicators Related to Health	Target	Achievement of Bangladesh in last 20 years					Projected Values	
		2000	2005	2010	2015	2020	2025	2030
"5.2.1 Prevalence of intimate partner violence among women age 15 years and older in previous 12 months."	"Eliminate all forms of violence against all women and girls in public and private spheres, including trafficking and sexual and other types of exploitation."	27.1	24.6	22.8	21.8	20.8	19.6	18.5
"6.2.1 Risk-weighted prevalence of populations using unsafe or unimproved water as measured by summary exposure value(SEV)."	"By 2030, achieve universal and equitable access to safe and affordable drinking water for all."	80.9%	80.2%	79.1%	77.8%	77%	76.6%	76.2%
"6.2.1a Risk-weighted prevalence of populations using unsafe or unimproved sanitation as"	"By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations."	78.5%	73.6%	68.9%	66.9%	61.2%	53.9%	46.4%
"6.2.1b Risk-weighted prevalence of populations without access to hand wash facility"	"By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations."	76%	75.2%	74%	72.7%	71.1%	69.7%	68.2%
"7.1.2 Risk-weighted prevalence of household air pollution"	"By 2030, ensure universal access to affordable, reliable and modern energy."	55.4%	50.7%	45.4%	40.1%	35.9%	31.2%	26.8%
"8.8.2. All-cause DALY (Disability Adjusted Life Year) rate attributable to occupational risks(per 100,000)."	"Protect labor rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment."	1689	1625	1368	1235	1132	1045	970
"16.1.1 Population weighted mean level	"By 2030, reduce the adverse per capita	63	69	71	67	61	61.1	61.4

Sustainable Development Goals and Indicators Related to Health	Target	Achievement of Bangladesh in last 20 years					Projected Values	
		2000	2005	2010	2015	2020	2025	2030
of fine particulate matter smaller than (PM2.5) micrograms per cubic meter."	environmental impact of cities, including by paying special attention to air quality and municipal and other waste management."							
"16.1.1 Death rate due to interpersonal violence(per 100,000)"	"Significantly reduce all forms of violence and related death rates everywhere."	2.5	2.1	2.0	1.6	1.5	1.3	1.2
"16.1.2 Death rate due to conflict and terrorism (per 100,000)."	Do	0.02	0.1	0.01	0.07	0	0	0
"16.1.3a Prevalence of physical violence experienced by populations in last 12 months."	Do	10.9%	11%	11.1%	11.1%	11.1%	11.1%	11.1%
"16.1.3c Prevalence of sexual violence experienced by populations in last 12 months."	Do	2.4%	2.5%	2.5%	2.6%	2.6%	2.6%	2.6%
"16.2.3 Prevalence of men women aged 18-29 years who experienced sexual violence by the age of 18"	"End abuse, exploitations, trafficking and all forms of violence against and torture of children"	22.1%	22.2%	22.3%	22.4%	22.3%	22.2%	22.2%

Source: Author's Compilation by using Institute for Health Metrics and Evaluation (IHME), 2020 Data, Source: ("Health-related SDGs | IHME Viz Hub," 2021)

References

- Ahmed, S.M., Hossain, M.A., RajaChowdhury, A.M. et al. The health workforce crisis in Bangladesh: shortage, inappropriate skill-mix, and inequitable distribution. *Hum Resour Health* 9, 3 (2011). <https://doi.org/10.1186/1478-4491-9-3>
- BANGLADESH BUREAU OF STATISTICS. (2021). *Report on Bangladesh Sample Vital Statistics 2020* (pp. 1-50). Dhaka. Retrieved from http://bbs.portal.gov.bd/sites/default/files/files/bbs.portal.gov.bd/page/6a40a397_6ef7_48a3_80b3_78b8d1223e3f/2021-06-30-04-37-90c4374ce2c14b93852ae7830f7ec3c1.pdf
- Bangladesh Health Watch Secretariat. (2017). *Non-Communicable Diseases in Bangladesh* (pp. 70-78). Dhaka.

- Choudhary, Akanksha & Muthukkumaran, Gowtham & Singh, Ashish. (2019). Inequality of Opportunity in Indian Women. *Social Indicators Research*. 145. 10.1007/s11205-019-02097-w.
- Health-related SDGs | IHME Viz Hub*. Vizhub.healthdata.org. (2021). Retrieved 1 October 2020, from <https://vizhub.healthdata.org/sdg/>.
- Hosseinpoor AR, Bergen N, Schlotheuber A, Grove J. Measuring health inequalities in sustainable development goals. *Bulletin of the World Health Organization*. 2018;96(9):654-659. doi:10.2471/BLT.18.210401.
- Khan, J., Ahmed, S., & Evans, T. G. (2017). Catastrophic healthcare expenditure and poverty-related to out-of-pocket payments for healthcare in Bangladesh-an estimation of financial risk protection of universal health coverage. *Health policy and planning*, 32(8), 1106–1109. <https://doi.org/10.1093/heapol/czx048>
- Ministry of Finance, Peoples Republic of Bangladesh. (2021). *Bangladesh Economic Review 2021* (p. xxxii). Dhaka. Retrieved from https://mof.portal.gov.bd/sites/default/files/files/mof.portal.gov.bd/page/f2d8fabb_29c1_423a_9d37_cdb500260002/08.%20Socio-Economic%20Indicators%20of%20Bangladesh%20Eng-21.pdf
- Morton, S., David, P. and Squires, N. (2017), "Sustainable Development Goals (SDGs), and their implementation: a national global framework for health, development, and equity needs a systems approach at every level," *British Medical Bulletin*, Vol. 124 No. 1, pp. 80-83
- Mustafa, A., Rahman, A., Hossain, N., & Begum, T. (2018). *Bangladesh National Health Accounts 1997-2015 (BNHLA-V)* (pp. 6-8). Ministry of Health and Family Welfare
- National Institute of Population Research and Training (NIPORT), and ICF. (2019). *Bangladesh Demographic and Health Survey 2017-18: Key Indicators* (pp. 28-80). Dhaka. Retrieved from <https://www.dhsprogram.com/pubs/pdf/PR104/PR104.pdf>
- Oxford University Press. (2001). *WORLD DEVELOPMENT REPORT 2000/2001* (p. V-VI). New York. Retrieved from <https://documents1.worldbank.org/curated/en/230351468332946759/pdf/226840WDR00Pub0ng0poverty0200002001.pdf>
- Rahman, M.M. (2021), "Achieving Sustainable Development Goals of Agenda 2030 in Bangladesh: the crossroad of the governance and performance", *Public Administration and Policy: An Asia-Pacific Journal*, Vol. 24 No. 2, pp. 195-211. <https://doi.org/10.1108/PAP-12-2020-0056>
- Sachs, J., Schmidt-Traub, G., Kroll, C., Lafortune, G., Fuller, G. and Woelm, F. (2020), *sustainable development Report 2020*, Cambridge University Press, Cambridge.
- Sustainable Development Report 2021*. (2021). Retrieved 19 August 2021, from <https://dashboards.sdgindex.org/profiles/bangladesh>.
- World Health Organization. (2006). World Health Organization. The world health report 2006 (pp. 12-13). Geneva, Switzerland. Retrieved from https://www.who.int/whr/2006/whr06_en.pdf
- The World Health Organization and the World Bank(2019). *Global Monitoring Report on Financial Protection in Health 2019* (pp. 5-38). Retrieved from https://www.who.int/healthinfo/universal_health_coverage/report/fp_gmr_2019.pdf

THE 17 GOALS | Sustainable Development. Sdgs.un.org. (2021). Retrieved 9 October 2020, from <https://sdgs.un.org/goals>.

World Social Report. (2020). Retrieved from <https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2020/02/World-Social-Report-2020-Chapter-1.pdf>



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