

COVID-19 Effects on SDGs in Bangladesh: A Systematic Literature Review

RAFI, MD. RAKIBUL HASAN¹, KAMRAN, MD. SAIFULLA², and TARIF SADMAN³

¹Department: Computer Science Engineering American International University-Bangladesh

²Department: Computer Science Engineering American International University-Bangladesh

³Department: Computer Science Engineering American International University-Bangladesh

September 22, 2021

Abstract

Covid-19 pandemic is a global issue nowadays. Community transmission of Covid-19 is also frequent in Bangladesh. The article focuses on critical aspects of the pandemic situation and how it creates a massive challenge to achieve all 17 agendas of SDGs by 2030. Mainly, it is a systematic qualitative analysis of irreparable damages to people's lives caused by the pandemic. Increasing poverty, lack of good health facilities, interruption in quality education, gender inequality, scarcity of decent work, economic hamper, a slowdown in vital infrastructures or sustainable cities, etc., are significant consequences of this pandemic

found in Bangladesh. The study of different qualitative and systematic methods will give a clear identification. This paper will provide a precise scenario and empirical investigation on the impacts of Covid-19 on SDGs in Bangladesh through a systematic literature review. In this review paper, we chose eight (8) articles in a systematic way from renowned publications to go through them. The results summarize the pandemic effect on SDGs, give an idea of how the government and people of Bangladesh can deal with it, and show the gaps and future research directions.

1 Introduction

COVID-19 is a transnational public health emergency that poses a serious threat to countries with weak health systems. According to the WHO, between March 8, 2020, and March 21, 2021, there were 570,878 COVID-19 cases verified by numerous tests, with eight thousand six hundred and ninety (8,690) deaths, a 1.52 percent increase (figure-1). COVID-19's effects will be amplified by the country's multiple vulnerabilities, resulting in a multifaceted disaster [1]. The socio-economic and development implications, food insecurity, and rising poverty due to COVID-19 at the community level must be coordinated in Bangladesh [3]. The primary focus of this research is on Bangladesh's inherent weaknesses through a systematic literature review (SLR). This study is based on the SDGs literature and considers a broad context of the pandemic crisis to measure the loss among the most immediately affected SDGs. This paper also presents the potential effects of COVID-19 on several variables as the primary goal of this study is to assess the potential impact of COVID-19 and identify solutions to this problem in the context of Bangladesh.

Index Terms- Covid-19, Pandemic, Sustainable Development Goals, Qualitative, Empirical Investigation, Systematic Literature Review.

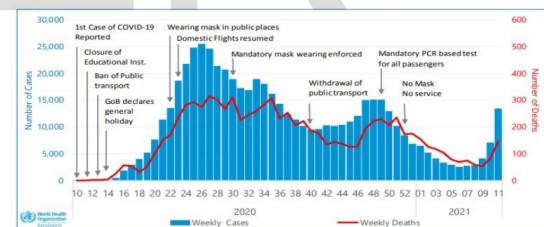


Figure-1: Covid-19 cases recorded cumulative and weekly deaths from March 21, 2021.

The short-run measures like rehabilitation of societies, education, information, new cultural norms, etc., need to be taken to achieve a sustainable development plan [4]. Leaving no one behind- the plan of SDGs requires transformation at all levels [7]. Since the Seventh Five Year Plan 2016–2020 in 2015, the Bangladesh government has intended to attain the SDGs [1]. However, the usefulness of this five-year plan is being questioned due to slow development. Here, we also show the limitations of the findings and provide recommendations for future research. Here first, we have discussed the context. Section 2 will show the framework of our systematic literature review and our research question and methodology. Data analysis, answer to the questions in section 3, and empirical investigations will conduct in section 4. Section 5 will show the threads to validity and limitations of the study. Finally, recommendations and concluding remarks are presented in Section 6.

2 Review Methodology

Systematic literature review (SLR) is highly recommended by a large number of researchers because of its involvement in many discrete tasks while conducting. An overall review process is given below in **figure-2**.

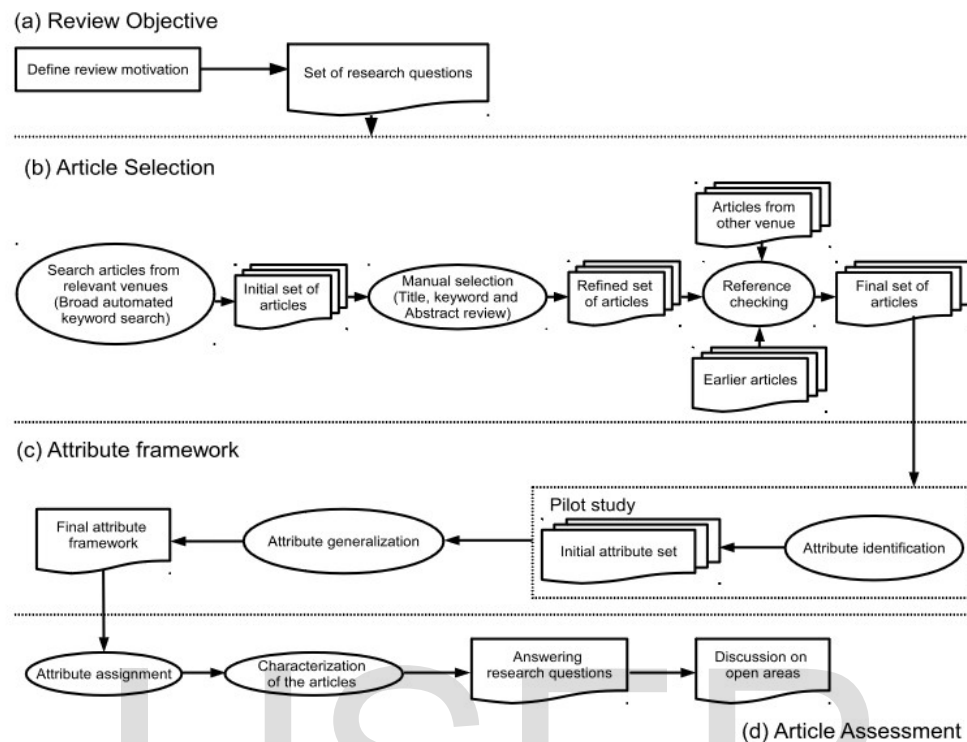


Figure-2: Overview of Systematic Literature Review

This overview describes the whole Systematic Literature Review protocols to be maintained. We are going to discuss these tasks briefly.

Here, as we can see, defining review motivation is the first step towards progress. This may vary from one to another person who is reviewing different papers. Defining this would help reduce the researcher biases. In our case, the motivation comes from our own situ-

ation that we are in for a long time due to this global pandemic. If we can address the scopes discussed in papers, it may be helpful for the whole community to come out to the light in these tough times. Research questions: We have defined some research questions that are within the context of effect of Covid-19 on SDGs in Bangladesh. All these questions demand answers to fulfill each of their specific motivations.

RQ No	Research Question
1	Which facets of effects of COVID-19 on SDGs are explored?
2	What are the research approaches followed in the studies?
3	What are the ways of validating research approaches and results of the articles?
4	How analyzing the context is contributing in the literature?

Article Selection: This section defines the whole process where we selected the articles. The process consists of different stages which we have come through including inclusion criteria, automated keyword search, manual selection and reference checking for the articles selected.

- **Inclusion criteria:** Besides the research questions defined, there are some more criteria we have followed that are satisfied by our selected articles. 1. Discussed subject of the articles must be about the effects of COVID19. Authors of the articles must clearly clarify the target behind

their efforts at the beginning and all the details must be provided in brief. 2. Articles must be published in refereed journals.

- **Automated keyword search:** This process was held based on some keywords chosen by authors. Digital library, Google Scholar was used to do this search. Search was basically based on the title, keyword and abstracts of the articles in the library. The time range selected for the search was from December, 2019 to July, 2021.
- **Manual selection:** After the automated search

was conducted we found a lot of articles as a result. But while checking one by one, some of those articles were found not to be within our targeted area. So to minimize the result to the least and exactly as we wanted we had to go through this manual process by reviewing titles, abstracts and keywords of each article. Domain researchers also examined the articles considering our selection criteria. Afterwards, we ended up with 9 articles in total.

- **Reference checking:** Inclusion of relevant articles was ensured by performing a non-recursive search through the references of 9 selected articles. No additional article was required to be added.

3 Review Results

In this section, we reviewed the results of this review in brief by answering the **RQs**.

RQ1. Facets that are explored - While studying in-depth, we divided the articles to fall within 3 facets. Those are Social, Economical and Health. The context demands attention from each facet equally, so that was the way authors also responded with. Getting equal priorities completes all the articles on their own basis.

RQ2. Research approaches - Different approaches were followed in different studies among selected articles. Here the approaches are Empirical investigation[1][2][4][5][7][6], Total implementation[8] comparative[3] approach. Point to be noted that most of the articles were approached in an Empirically investigation way.

RQ3. Validating approaches and results- When we went through all the articles in brief we got to know the motivation behind the approaches taken for each study respectively. Cross validation[3], communicative validation[6] was made in required cases. Other studies were validated in some other ways to clear the doubts. Results were to measure these validation in terms of quality.

RQ4. Contribution of analyzing the studies- Analyzing the selected studies will bring the information that'd be of help for the respective authority to get into action for the prevention process. It is noticed that all the studies were basically how the pandemic affected a nation in each way and finally the impact on SDGs. An article was published to clarify the goals of SDGs in 2020[8]. It was based on the scenario without any such interruption as COVID situation. Other articles include the impact of it on SDGs[7], challenges to face afterwards and the way this situation is hampering progress in every sector. E.g. The huge impact in the air due to this crisis has been discussed in an article briefly as it was clarified as one of the findings of the study[5]. Each study came up with some specific data based findings to fulfill the objective determined before research.

4 Avenue To Future Results

We have researched with some limitations of short time and the lockdown. But We want to research on it more in future. We want to skim all the goals of SDGs. Besides we want to stimulate the particular topic we have mentioned already in our project like mental stress during lockdown, health issues, economical effects, online education etc. In our systematic literature review we described some question answer that we collected to some anonymous job holders, students and teachers. We have tried to compare the effects and regular life leading policy during pandemic of various stage people in our country. After analyzing we discovered that the success during lockdown is only the online education. People have known about online meeting, a lot of technologies that can make our life easy enough etc. But there are also have some disadvantages of this online activities. In example the young age people engaged with video games than study. Besides there are some questions of unfair means in online examination. Moreover, many students couldn't join the online classes for internet connection, high price of bandwidth and the poor infrastructure of internet in our country. On the other hand, mental stress is notably raised. Most of the people think that lockdown is a word of stress than the safety. So, we want to research on it more. We want to collect the compliment from the root level society of our country. We believe that if we can do more research on it then we can find a solution that how our life can become normal that we can achieve our basic needs and the goals of SDGs perfectly.

5 Threats To Validity

Every research has some threats that how the perspective can survive in future. As example our research is the trendy situation we are leading now. The WHO already declared that we cannot recover 100 percent from COVID-19. This can be a great alarm for us. We have to think of our new normal life. But we are confusion that whether the new normal life will not be the cause of our national mental health issue along with the economical issue or not. We need to think on the perspective of our large community. We have to understand that the needs of our mass people. In the world in many countries we can see that there is some protest against lockdown. In Australia a banner was got intention. It was written that "The country in Stress." So, this the fact that we have to think again and again. In our project we recognize it as our threat. We have to recover our threats and have to make our project perfectly okay that we can achieve our goal fast and safely.

6 Discussion

In this systematic literature review (SLR) paper, we created an attribute framework and then investigated

a set of research questions with their answers systematically. We also included a detailed summary of the most critical research findings. The characterization of the reviewed articles will help researchers investigate previous studies from overviews, methods, and collected data-sets, tool sets, and performance analysis and validation techniques effectively and efficiently. Recent studies on SDGs under COVID-19 focus on effects on one selected SDGs or one specific sector [6]. Despite the survey's minimal response, several assumptions could lead to future research in the field [2]. The focus is on better understanding the developing effects on SDGs inter-connectivity due to the COVID-19 pandemic and its management [6]. It is a comprehensive assessment rather than the indicators in each SDGs, but it should achieve it through a unified approach to SDGs [1]. Long-term strategic plans can incorporate into the Perspective Plan 2041, and Bangladesh delta plans 2100 for better strategic management [3]. Regardless of the lockdown scenario, fundamental support for the masses should ensure. It isn't easy without solid strategic planning and multi-sectoral collaboration for long-term sustainability, including the private sector and foreign assistance.

References

- [1] Vulnerabilities to COVID-19 in Bangladesh and a Reconsideration of Sustainable Development Goals. . Sakamoto, M., Begum, S. and Ahmed, T., 2020.
- [2] GLOBAL PANDEMIC SITUATION, RESPONSES AND MEASURES IN BANGLADESH: NEW NORMAL AND SUSTAINABILITY PERSPECTIVE. . Al Masud, A. Md.Hossain, M., Roy, D. K., Md. Hossain, S., Md. Nabi. N., Ferdous, A. and Hossain, M.T., International Journal of Asian Social Science, 2021.
- [3] Strategic assessment of COVID 19 pandemic in Bangladesh: comparative lockdown scenario analysis, public perception, and management for sustainability. . Shammi, M., Bodrud-Doza, M., Islam, A.R.M.T. and Rahman, M.M., 2021.
- [4] Impact of COVID-19 Pandemic on Sustainable Development Goals: What We Learn from the Past and Where We Are Heading? . Qureshi, M.I. and Khan, N., 2020.
- [5] The impact of COVID-19 pandemic on sustainable development goals – A survey . Wang, Q. and Huang, R., 2021.
- [6] Effects of COVID 19 on the Sustainable Development Goals (SDGs) . Shulla, K., Voigt, B.F., Cibian, S., Scandone, G., Martinez, E., Nelkovski, F. and Salehi, P., 2021.
- [7] Government of the People's Republic of Bangladesh June 2020.
- [8] SUSTAINABLE DEVELOPMENT GOALS BANGLADESH PROGRESS REPORT 2020, General Economic Division (GED), Bangladesh Planning Commission Ministry of Planning Government of the People's Republic of Bangladesh, June 2020.