



Faculty of Manufacturing Engineering

INVESTIGATING THE IMPACTS OF THE GLOBAL CRISIS ON SUSTAINABILITY ASPECTS: SOCIAL- ECONOMY-ENVIRONMENT

اونيورسيتي تيكنيكل مليسيا ملاك
— CHANDRA SEGAR A/L ANANTHANARAYANAN —
UNIVERSITI TEKNIKAL MALAYSIA MELAKA

**Master of Manufacturing Engineering
(Manufacturing System Engineering)**

2023

**INVESTIGATING THE IMPACTS OF THE GLOBAL CRISIS ON
SUSTAINABILITY ASPECTS: SOCIAL-ECONOMY-
ENVIRONMENT**

CHANDRA SEGAR A/L ANANTHANARAYANAN



UNIVERSITI TEKNIKAL MALAYSIA MELAKA

2023

DECLARATIONS

I hereby, declared this report entitled “Investigating the impacts of the global crisis on sustainability aspects; social-economy-environment” is the results of my own research except as cited in references. This thesis has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.

Signature : 

Name : CHANDRA SEGAR A/L ANANTHANARAYANAN

Date : 21/08/2023


اونيورسيتي تيكنيكل مليسيا ملاك
UNIVERSITI TEKNIKAL MALAYSIA MELAKA

APPROVAL

I hereby declare that I have read this report and in my opinion, this report is sufficient in terms of scope and quality as a partial fulfillment of Master of Manufacturing Engineering (Manufacturing System)

Signature : 

Name : PROFESOR MADYA DR ZUHRIAH EBRAHIM

Date : 21/08/2023

اونيورسيتي تيكنيكل مليسيا ملاك

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

ABSTRACT

This research is conducted to study the impact of recent global crises on the three pillars of sustainability, namely economic, social, and environmental aspects. Through a qualitative methodology, the study focuses on three main objectives; (i) identifying the global crises experienced in the last five years (2017-2022), (ii) analyzing the causes of these crises, and (iii) assessing their impact on sustainability aspects. The research solely relies on secondary sources, including past papers, research articles, and online resources, to gather relevant information, which is then analyzed theoretically. This study classifies the measure of the global impacts on the pillars of sustainability (Economy-Social-Environment) into three; (i) Level 1 as low impact, (ii) Level 2 as moderate impact, and (iii) Level 3 as strong impact. The key findings of the study reveal that global crises significantly affect all three aspects of sustainability. The research identifies three major crises that have impacted the world during the specified period: Covid-19 pandemic, Russia-Ukraine war, and an energy crisis. The causes of these crises are studied, with Covid-19 arising as a health crisis due to the unavailability of medicines and vaccines, the Russia-Ukraine war resulting from the invasion for resources, and the energy crisis emerging from increased demand after the pandemic and war, coupled with poor energy production. Furthermore, the research examines how these crises impact the economy, environment, and social life of individuals. The Covid-19 pandemic severely affected global economies, leading to lockdowns, business closures, unemployment, and declined incomes. However, it also brought about environmental improvements due to reduced industrial activity. The Russia-Ukraine war caused economic disruptions, scarcity of resources, increased food prices, and social upheaval. Additionally, it had adverse environmental impacts with increased pollution and damaged natural resources. The energy crisis led to energy scarcity, increased living costs, and heightened poverty, affecting both the economy and social well-being. Moreover, it resulted in greater reliance on fossil fuels, further contributing to environmental pollution. The research also revealed that recent global crises have substantial effects on sustainability, impacting up to Level 3 for all three pillars especially the Ukraine War. The findings provide valuable insights into the consequences of these crises, assisting in formulating strategies to enhance global resilience and sustainability.

ABSTRAK

Kajian ini dijalankan untuk mengkaji impak krisis global terkini terhadap tiga aspek kelestarian utama iaitu ekonomi, sosial, dan alam sekitar. Melalui metodologi kualitatif, kajian ini memberi tumpuan kepada tiga objektif utama; (i) mengenal pasti krisis global yang dialami dalam lima tahun terakhir (2017-2022), (ii) menganalisis punca-punca krisis ini, dan (iii) menilai impak mereka terhadap aspek kelestarian. Kajian ini bergantung sepenuhnya kepada sumber sekunder, termasuk kertas-kertas lama, artikel penyelidikan, dan sumber dalam talian, untuk mengumpul maklumat yang relevan, yang kemudiannya dianalisis secara teoretikal. Kajian ini mengelasifikasi ukuran impak global ke atas tonggak-tonggak kelestarian (Ekonomi-Sosial-Alam sekitar) kepada tiga tahap; (i) Tahap 1 sebagai impak rendah, (ii) Tahap 2 sebagai impak sederhana, dan (iii) Tahap 3 sebagai impak kuat. Hasil kajian menunjukkan bahawa krisis global memberi kesan yang signifikan terhadap ketiga-tiga aspek kelestarian. Penyelidikan mengenal pasti tiga krisis utama yang telah memberi impak kepada dunia dalam tempoh yang ditetapkan: pandemik Covid-19, peperangan Rusia-Ukraine, dan krisis tenaga. Punca-punca krisis ini dikaji, dengan Covid-19 muncul sebagai krisis kesihatan disebabkan oleh ketiadaan ubat-ubatan dan vaksin, peperangan Rusia-Ukraine berpunca daripada pencerobohan untuk sumber-sumber, dan krisis tenaga muncul daripada peningkatan permintaan selepas pandemik dan peperangan, disertai dengan pengeluaran tenaga yang lemah. Selanjutnya, kajian ini mengkaji bagaimana krisis ini memberi impak kepada ekonomi, alam sekitar, dan kehidupan sosial individu. Pandemik Covid-19 memberi kesan yang teruk kepada ekonomi global, menyebabkan kawalan pergerakan, penutupan perniagaan, pengangguran, dan pendapatan yang merosot. Namun begitu, ia juga membawa peningkatan alam sekitar disebabkan oleh pengurangan aktiviti industri. Peperangan Rusia-Ukraine menyebabkan gangguan ekonomi, kekurangan sumber, peningkatan harga makanan, dan goncangan sosial. Tambahan pula, ia memberi impak buruk kepada alam sekitar dengan peningkatan pencemaran dan kerosakan sumber semulajadi. Krisis tenaga menyebabkan kekurangan tenaga, peningkatan kos sara hidup, dan peningkatan kemiskinan, memberi kesan kepada kedua-dua ekonomi dan kesejahteraan sosial. Tambahan lagi, ia mengakibatkan ketergantungan yang lebih tinggi kepada bahan bakar fosil, yang turut menyumbang kepada pencemaran alam sekitar. Kajian ini turut mendedahkan bahawa krisis global terkini memberi kesan yang besar terhadap kelestarian, memberi impak hingga ke Tahap 3 untuk semua tiga tonggak terutamanya Peperangan Ukraine. Hasil kajian ini memberi pandangan yang berharga mengenai akibat-akibat krisis ini, membantu dalam merumuskan strategi untuk meningkatkan daya tahan dan kelestarian global.

ACKNOWLEDGEMENTS

First of all, I would like to extend my deepest gratitude to the almighty God for giving me the strength, faith and assistance in completing my thesis.

Secondly, I would like to thank my supervisor Profesor Madya Dr. Zuhriah Ebrahim from Faculty of Manufacturing Engineering University whose guidance, essential supervision and support have been in valuable towards completion of this thesis.

Besides that, I also would like to express my gratitude and appreciation to all those who gave me the creative thought and valuable discussion about my study. Also not, forget to the Faculty of Manufacturing Engineering, University Malaysia management for allowing and giving me a chance to gain useful knowledge and experiences.

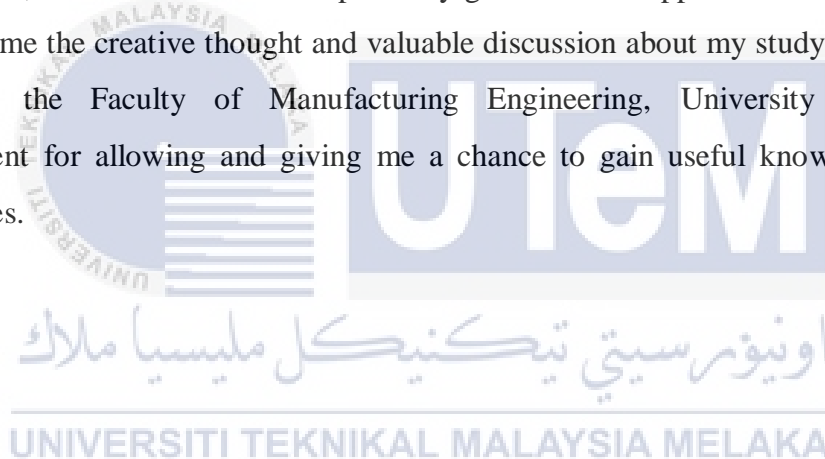


TABLE OF CONTENTS

	PAGE
DECLARATION	
APPROVAL	
ABSTRACT	i
ABSTRAK	ii
ACKNOWLEDGEMENTS	iii
TABLE OF CONTENTS	iv
LIST OF FIGURES	
LIST OF ABBREVIATIONS	vi
	vii
CHAPTER	
1. INTRODUCTION	1
1.1 Background	1
1.2 Problem statement	5
1.3 Research questions	6
1.4 Research objectives	7
1.5 Project scope	7
1.6 Project contribution	8
1.7 Project outline	8
2. LITERATURE REVIEW	10
2.1 Preliminary	10
2.2 Global crisis	10
2.2.1 History of major crisis	12
2.2.2 Recent major crisis	16
2.3 Sustainability concept	18
2.3.1 Definition (compare 1987 and 2015)	19
2.3.2 SDG pillars	19
2.4 Social sustainability	21
2.5 Environmental sustainability	23
2.6 Economic sustainability	24
2.7 Conceptual framework	26
2.8 Summary	27
3. RESEARCH METHODOLOGY	28
3.1 Preliminary	28
3.2 The project methodology	28
3.2.1 Research approach	29
3.2.2 Data collection and analysis	29
3.3 Identifying the recent global crisis (objective 1)	30
3.3.1 Data collection	30
3.3.2 Data analysis	31
3.4 Analyzing the root cause of the global crisis (objective 2)	31
3.4.1 Data collection	31
3.4.2 Data analysis	32

3.5	Measuring the impact of the global crisis on the sustainability goals (objective 3)	32
3.6	Summary	33
4.	RESULT AND ANALYSIS	35
4.1	Preliminary	35
4.2	Global crisis faced in past five years (objective 1)	36
4.3	Causes of these global crisis (objective 2)	38
4.3.1	Causes of Covid 19	38
4.3.2	Causes of Russia-Ukraine War	39
4.3.3	Causes of Energy crisis	39
4.4	Measuring the impact global crisis (objective 3)	40
4.4.1	Covid 19	40
4.4.2	Russia-Ukraine war	45
4.4.3	Energy crisis	47
4.5	Discussion	49
4.5.1	Covid 19	50
4.5.2	Russia-Ukraine war	53
4.5.3	Energy crisis	55
4.6	Summary	57
5.	CONCLUSION AND RECOMMENDATIONS	59
5.1	Conclusion	59
5.2	Recommendations	62
REFERENCES		63

اوتيم سیتی تکنیکل ملیسیا ملاک

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

LIST OF FIGURES

FIGURE	TITLE	PAGE
1.1	UN Sustainable Development Goals	4
2.1	Health Crisis	13
2.2	Suicide Rate Due to health crisis	13
2.3	Oil Prices	15
2.4	Food Systems in the Era of the Covid-19 Pandemic	16
2.5	Conceptual Framework	26
4.1	Mind Map	38
4.2	Unemployment Rate	41
4.3	Productions during Pandemic	42
4.4	Decline in Carbon Emission	44
4.5	Rise in Energy Prices	48
4.6	Impact of Russia-Ukraine War	51
4.7	Impact of Russia-Ukraine War	54
4.8	Impact of Energy Crisis	56

LIST OF ABBREVIATIONS

ESG	Environmental, Social and Governance
GDP	Gross Domestic Product
SARS-CoV-2	Severe Acute Respiratory Syndrome Coronavirus 2
SDGs	Sustainable development goals
SOPs	Standard Operating Procedures
UN	United Nations
WHO	World Health Organization



CHAPTER 1

INTRODUCTION

1.1 Background

Recent global crises created a worse impact on the nation of multiple parts of the world that include Covid-19 pandemic, the Ukraine war that has surged inflation, and the climate energy crisis. The Covid-19 pandemic crisis is about the global pandemic of coronavirus 2019 that caused by severe acute respiratory syndrome with the name coronavirus 2 (Covid-19) (Jackson, 2019). It created radical uncertainty and difficulty in supply chain and trading patterns in different regions where health, social and economic challenges have been faced to a greater extent (Azer et al., 2021). Ukraine war started on February 24, 2022, when 5.9 million people are displaced inside Ukraine causing a serious impact on the nation. It damaged different people badly by starting a war that was focused on destroying different people existing there in and around Ukraine (International Rescue Committee, 2022). Recent surging inflation is caused because of higher interest rates that would make the cost of borrowing less attractive for consumers and hence less demand for different goods and services is created for consumers. In this way, the inflation rate is rising in different countries creating serious impacts. On the other hand, a climate energy crisis has occurred in multiple parts of the world where the climate energy crisis is faced by people. The current global or climate energy crisis happened in 2021 with the Covid pandemic which there would start a shortage in oil and increase oil prices in the overall world (Vaughan, 2022).

The recent global crises such as Covid-19, the Ukraine war, surging inflation and climate energy crises have created a serious impact on sustainability around the world as it has become quite difficult for different people to survive in these crises and sustainable development is also affected in this way (Coyle, 2014). These crises have created economic, environmental, and social impacts where different people faced serious concerns in sustainability development by providing effective causes for multiple nations effectively (Poudyal, 2019). During Covid-19 pandemic crisis, according to economic impact, there was a sharp decline in economic activity of different countries, an inflation rate arises and the rate of unemployment also increased which would assist in making a negative impact on the sustainability in Covid-19 pandemic. The living standards of people also impacted a lot and multiple businesses also faced a huge problem in terms of loss according to the social impact of sustainability and the increase of medical waste and burden of untreated waste created a negative environmental impact. The surging inflation has resulted in a reduction in the number of jobs, which shows that the crisis has created a negative impact on people based on an economic perspective. The global crises have created serious environmental problems that made a huge contribution to global warming with negative impacts based on the environmental impact of these global crises (Buallay et al., 2021). Some businesses shut down as they faced serious issues in maintaining profitability because they were going into loss. Due to the Ukraine war, food resources were available in scarce and people were unemployed. Water pollution, deforestation, and air pollution are created due to global crises in multiple parts of the world. In terms of sustainability issues, poverty, inequality, food insecurity, and a decline in access to education and healthcare created for multiple people due to the Ukraine war. When all such crisis exists in different regions, then sustainability became quite difficult which would rise to poverty and unemployment by creating serious negative issues for different

people existing there (Amankwah-Amoah, 2020). This shows that all three global crises have a huge impact in the form of environmental, societal and economic impacts that need to be minimized by paying considerable attention to the global economy as a whole. The goal of improving the three-dimensional condition can be achieved by shifting the focus toward sustainability.

Sustainability is defined as fulfilling the needs of the present generation without compromising the needs of future generations by ensuring a balance between social well-being, environmental care and economic growth (Islam, 2017). Today, the world is facing several issues related to environmental protection and economic growth. These issues are divided into five main areas: Issues related to development, climate change issues, water issues, land issues and cross-cutting issues. Some nations do possess enough capacity to assist environmental, economic and social actions on a global level but without the support of the relevant government, it is impossible to minimize the potential impact of these global crises (United Nations, 2023). These crises create challenges related to sustainability in the form of ensuring food security and food safety for nine billion people, challenges arise for mitigation of climate change and adaptation. As a result, it is difficult to manage the unintended outcomes and changing face of waste, avoiding electronic waste and solving the impending limitations of strategic minerals (Kapstein, 2018). To overcome these issues, the purpose of sustainable development goals (SDGs) is to transform the entire world. They act as a call to action to end inequality, and poverty, protect the earth and ensure that all people fairly enjoy prosperity, justice and health. All nations in the United Nations have adopted the 2030 Target for Sustainable Development. These goals are categorized into seventeen that have a total of 169 targets (World Health Organization, 2023).



Figure 1.1: UN Sustainable Development Goals (World Health Organization. 2023)

To control the impact of global crises, SDG 17 relates to strengthening the means of implementation and revitalizing the Global Partnership for Sustainable Development. SDG 17 calls for a global partnership for sustainable development. The goal sheds light upon the importance of macroeconomic stability globally and the requirement to mobilize financial resources from international sources for developing countries. Besides, SDG 17 focuses on the importance of access to science, innovation and technology in particular internet-based communications and information technology.

The 2030 target and sustainable development goals provide a detailed vision for sustainable development to mitigate the challenges that arise from the recent global crisis. The goals are not limited to developing countries but rather global and are based on respect for human rights and equity. They rely on approaches such as evaluation, monitoring, innovation, scientific research and sustainable financing. In responding to the social, environmental and economic crisis, sustainable development requires a new way of

working involving intersect oral action by multiple stakeholders and support from the community. The global economy needs to pay attention to the achievement of these goals to improve the impact of these crises. The crises have affected the livelihood of people as many of them are suffering from hunger, poverty, and unemployment and that is food for thought for almost every nation.

Today, sustainable development has become an indispensable thing in this world and it constitutes a robust support factor for the procedure of facing the recent crises and if the aims of improving social, environmental and economic well-being are approved by the UN then countries are likely to rise to an advanced level (Al- Dabbagh, 2020). The global crises have received global and international attention and serious discussions are required on the use of natural resources to minimize the impact of crises to create favorable situations for the future.

1.2 Problem statement

The Sustainable Development Goals (SDGs) also known as global goals were adopted in 2015 by the United Nations as a universal call to action to end poverty, protect the planet and ensure that all people enjoy prosperity and peace by 2030. Sustainable development goals are calls to action that would result in reducing poverty and maintaining better economic conditions. 17 sustainable development goals include no poverty, zero hunger, good health and wellbeing, quality education, gender equality, clean water and sanitation, affordable and clean energy, decent work and economy growth, industry, innovation and infrastructure, reduced inequality, sustainable cities and communities, responsible consumption and production, climate action, life below water, life on land, peace and justice strong institutions and partnership to achieve goals (United Nations, 2023). The 17 SDGs are integrated but SDG 08 (decent work and economic growth) is

related to meeting the global criteria to end the impact of recent crises such as inflation, and the impact of the Ukraine war in the form of shortage and energy crisis. The goal focuses on decent work and economic growth so that everybody can respond to these crises. Very few studies have highlighted the impact of sustainability as countries are supposed to prioritize progress. SDGs are solely designed to end hunger, poverty, AIDs and much more by minimizing the impact of the external environment and these crises (UNDP, 2022). To fulfill this gap, the project aims to focus on how these crises affect the economies by realizing the importance of financial resources, technology, know-how and creativity to achieve the SDGs in each context. There is a huge gap to realize the importance of the 2030 target that relates to a promise to improve the earth's conditions and the lives of citizens by 2030. Besides, it is important to know the level of impact of these crises so that SDG 17 can be achieved efficiently. The crisis of the war in Ukraine has produced an alarming cascading influence on a world that is battered by energy climate change and the coronavirus pandemic (Eurostate, 2022). Serious damage has been done to the global economy, environment and society, particularly to developing countries and vulnerable people. SDGs can be achieved by urging all nations to keep the market open, resist unnecessary and unjustified restrictions and make reserves available to nations that are at high risk of famine and hunger. Very few studies have raised concerns regarding the impact of recent crises like the War of Ukraine. Hence, the project discusses in detail the impact on the economy, environment and society of different nations.

1.3 Research questions

The following are the research questions of the study:

RQ1: What are the recent global crises in the near five years (2017-2022)?

RQ2: What are the causes of these global crises?

RQ3: How much do these global crises affect the economy, environment and social life of individuals?

1.4 Research objectives

The project aims to investigate the impacts of the global crisis on sustainability aspects and; the social- the economy-environment so the objectives of the project are given as:

RO1: To identify the recent global crises in nearly five years (2017-2022)

RO2: To analyze the causes of these global crises that have harmed sustainability aspects

RO3: To measure the impact of these global crises on the sustainability of the economy, Environment and social life of individuals,

1.5 Project scope

The project discusses three main crises in detail that occurred recently like the Covid-19 pandemic, the energy crisis and the impact of the war in Ukraine. These crises have huge environmental, economic and social impacts that have affected the livelihood of the world, especially in developing nations. In response to this, the project studies SDGs 17 and researches how these goals balance the ecological, social and economic dimensions of sustainable development and place the fight against sustainable development and poverty for the first time on the agenda to create this world a better place to live. The topic revolves around the social, economic and environmental impact of the recent crises that occurred from 2017 and onwards. The study also discusses the history of such crises to compare the situations before and after. The study is not limited to a particular country but discusses the global impact of recent crises and provides a macroeconomic view of the environmental, social and economic impact of such crises.

1.6 Project contribution

The project measures the impact of global crises so that policymakers can design policies and come up with practices to reduce the overall hazardous impact. Measuring the impact will be three-dimensional such as economic, environmental and social effects so that countries can know how these three areas are affected in these recent years. Realizing the potential impact will help them to act accordingly on the relevant policies that are necessary to improve the well-being of nations (Aktar, 2021). Once the impact is measured and the causes of these crises are known to them, they are likely to remain alert the next time to avoid repeating such actions in the future. This shows that the project is likely to make a significant contribution to the global economy to know how they can work on technology and capacity building to tackle the effects of the recent crises on sustainable development.

1.7 Project outline

The project is divided into five main chapters that are given as:

- i. **Chapter One - Introduction:** It is the initial chapter that begins with the topic background, and problem statement; research aim, questions and objectives to highlight what the topic is all about and what is the purpose of the project. The chapter serves as the basis on which the entire research/project is based. The headings of objectives and questions decide what needs to be done in LR and which type of data is required to be collected to achieve the research purpose.
- ii. **Chapter Two - Literature Review:** The chapter based on a critical evaluation and assessment of the articles related to the topic such as sustainability aspects, the history of global crises and how they have affected society as a whole. Here, the

researcher ensures that critical evaluation is based on recent and updated information.

- iii. **Chapter Three - Methodology:** This chapter acts as the pathway to collect data for the project. The methodology is based on Saunder's research onion followed by limitations and ethical considerations at the end.
- iv. **Chapter Four - Results And Discussion:** Here, data will collected and analyzed using qualitative or quantitative tools depending upon the choice that matches with research goals. The chapter will analyze the impact of global crises on the sustainability of society (economic, environmental and social) as a whole.
- v. **Chapter Five - Conclusion And Recommendations:** This is the last chapter and it will summarize the findings of the topic. The chapter also has a section of recommendations that explains what and how the impact of global crises can be controlled followed by future research suggestions. The recommendations are based on the study topic and findings and the future research suggestions will elaborate on current study weaknesses to convert them into strengths for the future.

CHAPTER 2

LITERATURE REVIEW

2.1 Preliminary

This is the second chapter of this project and is solely dedicated to reviewing the literature available in detail on the topic under consideration; that is, investigating the impacts of the global crisis on sustainability aspects; the social- economy-environment. For this reason, a lot of theoretical and conceptual aspects are covered. Also, the chapter attempts to shed light upon the history of global crisis and sustainability followed by a conceptual framework for the study at the end of this chapter.

2.2 Global crisis

Global crises have been defined as such events that create a negative impact on all countries of the world based on economic, social, environmental, cultural, and political issues (Liu et al., 2020). Such crises can be a result of natural disasters or war, pandemics, economic decline, and different events creating a worse impact on the different nations. These create more impact on developing countries as compared to developed countries where the decline in trade happens, reduction in credit access, and decreasing demand of products due to which export sector is negatively impacted and growth and development of such countries also impacted a lot (Leal Filho et al., 2021). While, developed countries also get negative impacts by creating a severe effect on economic, social, and environmental

levels where the major aspect is associated with providing less demand for different products and services for people by multiple countries. The main causes of the global crisis include increased borrowing by the bank, regulations and different policy errors, stress created in the financial system, and excessive risk-taking for different regions. Whenever global crises exist, these are major reasons for the downfall of economies of countries existing in the world as an overall impact is created on various countries (Karabag, 2020).

Global crises are of mainly three type health crises, food crises, and energy crises (Grande, 2022). A health crisis is a difficult situation existing following a complex health system that can affect the health of people in different geographical regions of the world. Sometimes, chronic diseases are caused due to health crisis where it is quite difficult to provide effective health mechanism for different people due to which illness is spread out and the health of different people are impacted a lot. It can create a point in disease where decisive change has occurred that can lead to the recovery or death of different people (Liu et al., 2020). While on the other hand, a food crisis occurred when the hunger rate increased due to which malnutrition occurred in various people at the local level, national and global levels. It creates a negative impact on the health conditions of different people where they do not find adequate food to satisfy their hunger and as a result, deficiencies of iron, calcium, minerals, and vitamins are caused by providing a severe impact on the physical condition of different people. It can occur due to hyperinflation, environmental shocks, and increase in commodity prices where the power to purchase products by consumer decline resulting in a major food crisis. In this way, the energy crisis is also of negative impact on different people living in various parts of the world. The energy crisis is the shortage of energy where there exists a significant bottleneck while supplying energy resources to economies of different countries. It would result in declining in power generation and create a negative effect on providing and supplying energy to different people. It can occur

due to increased population, greater use of non-renewable energy sources, waste of energy, and excessive consumption of energy. All of these crises would term under global crises due to which there exist negative effects on various people of the world (Grande, 2022).

2.2.1 History of major crisis

Health crises, food crises, and energy crises are negatively impacting for lives of different people. In the past years 1920 to 2022, this crisis existed by causing worse effects for different people where it was difficult for people of different regions to manage different things and perspectives existing there. In the first half of the 20th century, Spanish influenza, psittacosis, and Spanish influenza are spread out and health crises happened to destroy the health of different people by creating negative aspects and providing worse essentials existing there. In 1920, the Spanish flu spread out and 675,000 people died (Ghaffari et al., 2019). In 1957, Asian flu was spread, in 1968, Hong Kong flu and in 2009 Swine flu was created. This sickness affected young people, with an average age of people with 28 years. It was difficult for people to cope with these illnesses and provide major aspects where the spreading of disease was quite common. It killed 50 million people and people from multiple regions in all countries are impacted a lot by providing severe and unbearable perspectives (Piret and Boivin, 2021).

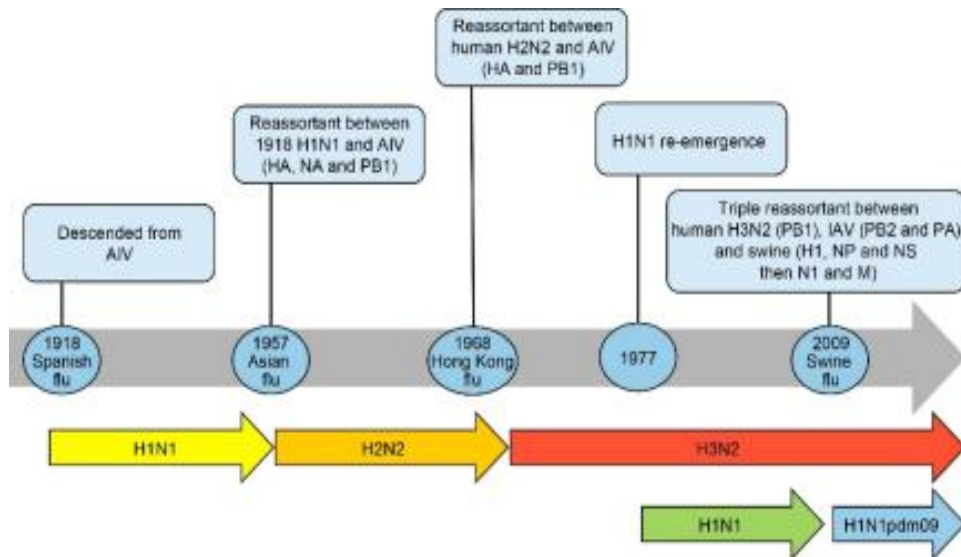


Figure 2.1: Health crisis (Piret and Boivin, 2021)

In the second half of the 20th century from the time frame of 1951 to 2000, AIDS and Legionnaires disease spread out by impacting thousands of lives of people as it was tough to take preventive measures at that time when multiple people were passing through a severe health crisis. While, at the start of the 21st century in 2000, the SARS, Ebola, Zika, and Covid-19 pandemics existed to create major impacts (da Costa et al., 2020)

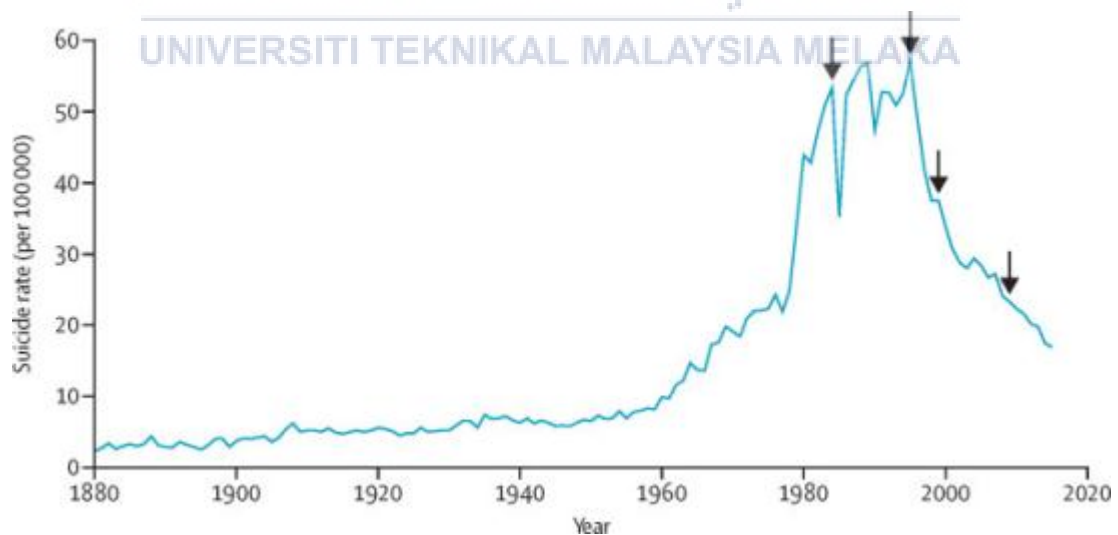


Figure 2.2: Suicide Rate Due to health crisis (Lee et al., 2021)