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**SUSTAINABLE BUILT  
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# e-Proceeding

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# CAUSES AND IMPACTS OF FLOODING TOWARDS THE FLOOD VICTIMS IN TAMAN SRI MUDA, SHAH ALAM, SELANGOR.

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## ABSTRACT

*Floods are the most significant natural disasters which affect many people and inflict damage worth several million every year in Malaysia. Unfortunately, in December 2021, the nation experienced a heartbreaking episode of floods across eight states, including the area of Shah Alam, Selangor. Shah Alam is disposed to flood when heavy rainfall occurs, leading to extensive damage and disruptions for its residents. Effective flood relief management is crucial to mitigate the damages, ensure the safety and well-being of residents, and facilitate a swift recovery process. The aim of the paper is to explore and assess the perceptions of residents in Shah Alam, Selangor, regarding issues, causes, and impacts of flooding, with the goal of providing valuable insights to the authorities. The research methodology used in this research was the quantitative method, specifically the observation method questionnaire method. The study consists of a questionnaire survey, a survey of residents' perceptions of various agencies, and an analysis of the data gathered. The results show the recognition of residents toward issues arising, causes and impacts of flooding toward residents. The data analysis reveals causes of flooding which are natural factors and human factors while impact of flooding which are individual, communities and economic factors. The findings will help the authority to take further action in improving and enhancing our country's flood management will increase the resilience of the country, minimise flood-related damages, and develop the overall safety and well-being of its residents.*

**Keywords:** *Flood relief management, Causes, Impacts to flood victims*

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## INTRODUCTION

Malaysia is a country that has been hit by floods, particularly during the monsoon season. Floods are the most significant natural disasters affecting many people and inflict damage worth several million every year in Malaysia. The recent Intergovernmental Panel on Climate Change (IPCC) report in 2022 highlighted the continuous rise in global surface temperature. During the monsoon season, flooding occurs in all four regions of the country: north, central, east, and south. The primary source of flooding in Malaysia is severe monsoon or convective rainfall, which results in a huge concentration of runoff that has been compounded by fast expansion in the river basin and decreased river capacity. Several states in Malaysia have experienced numerous episodes of major floods that have left state functions almost paralysed (Rahman, 2022). According to Yahaya et al. (2015) and Baharuddin et al. (2015), the 2014 Kelantan flood was the largest recorded flooding event of the century. More recently, in December 2021, the nation experienced a heartbreaking episode of floods across eight states, including Selangor, that resulted in the deaths of almost 50 people and the displacement of about 40,000 people.

Floods and other risks linked to extreme weather are anticipated to occur more frequently as a result of climate change (IPCC, 2022). Significant losses are incurred in Malaysia as a result of the annual flooding brought on by the seasonal monsoon. These occurrences have impacted the socioeconomic system regarding flood damages (Yusmah et al., 2020). In order to enhance preparedness for climate change, it is crucial to have a local awareness of floods. According to Noorazuan (2003), town drainage density is undeveloped in accordance with town growth, resulting in flood disasters. Indirectly, the flood tragedy, which occurs virtually every year, will result in a great deal of loss for flood victims, including loss of life, disease spread, property destruction, plant destruction, and other significant losses (Chan & Parker, 1996). Furthermore, the flood relief facilities are in poor condition, which increases the victims' stress because their homes and land are inundated simultaneously, destroying plants and farm animals (Mohd Zulhafiz et al., 2013). The most recent assessment from the Intergovernmental Panel on Climate Change (IPCC), published in 2022, highlighted that the average global surface temperature will keep rising. In general, floods are natural disasters that may cause significant infrastructure damage, disrupt daily life, and pose risks to the safety and well-being of communities. In recent years, floods have become more common in Shah Alam, Selangor, necessitating the urgent need for an adequate flood relief management system. This method attempts to reduce the impact of flooding and provide prompt assistance to individuals affected by it. This study will examine the flood relief plans and activities conducted in Shah Alam, with an emphasis on the joint efforts of the local government, non-governmental organisations (NGOs), and community engagement.

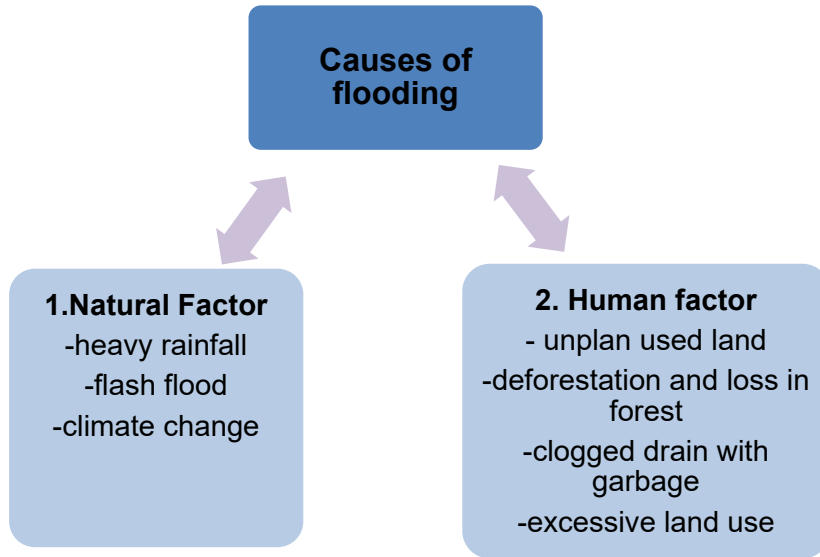
In other hand, Selangor has been surpassing the other states economically in Malaysia, making it one of the most demanded places to live due to its stable economy, employment prospects, good infrastructure, and facilities (Husin et al. 2020). With a surge in population, Selangor has become the most developed and progressive state, drawing people and development to low-lying areas, including floodplains and coastal plains (Nor Ain Kandari et al., 2018; Yahaya et al., 2022). Selangor has been facing floods, especially in the metropolitan area, inflicting property damages and economic losses. The local authorities in Selangor have encountered challenges in effectively controlling the problem due to the catastrophic floods that erupted quickly and simultaneously at numerous locations (Yahaya et al., 2022). Therefore, the aim of the paper is to explore and assess the perceptions of residents in Shah Alam, Selangor, regarding issues, causes, and impacts of flooding, with the goal of providing valuable insights to the authorities.

## **LITERATURE REVIEW**

A geologically stable area, Malaysia is free of earthquakes, volcanic eruptions, and powerful winds like tropical cyclones that occasionally afflict some of its neighbours'. Geographically, it lies outside the "Pacific Ring of Fire" (Rabiul et al. 2016). As a result, Malaysia does not experience earthquakes or volcanic eruptions. Despite occasionally being impacted by tropical storm tail ends, it is too far south of the main typhoon pathways. Moreover, flooding is one of the incidents caused by non-stop heavy rains and causes the water flow to peak quickly. This will make the drainage system receive more water that is more than usual, and it will cause the drain water to spill out. Kamarul Ismail (2017) states that floods will cause water levels to rise from normal and could bring disaster to the people in the surrounding areas. However, flooding is a significant natural phenomenon because it can seriously impact the country and the people, especially the population on the East Coast and the areas close to the river. For example, severe floods occurred in 2006, 2007, 2010, 2011, and 2014 as a result of the nation's exposure to extreme weather and climatic events over the past two decades. These were mainly monsoonal floods, which occur frequently and range in severity, location, and timing of occurrences. These floods caused enormous damages, including loss of life in many sections of the country vulnerable to monsoon winds. (Sharifah Meryam Shareh Musa et al, 2015).

### **Causes of Flooding**

Flooding in Malaysia is influenced by various factors (figure 1), including inadequate land use planning, unexpected climate changes, urban flooding, urbanisation, and flash floods. The lack of sufficient focus on flooding in land use plans contributes to the vulnerability of disaster-prone areas (Mohit & Karim, 1997). Climate change, as highlighted by the IPCC, leads to increased floods and rainfall in Southeast Asia, including Malaysia (Tang, 2019; Ehsan et al., 2022; IPCC, 2022).



**Figure 1: Causes of flooding**

Next, urban flooding occurs due to heavy rainfall and poor drainage systems, while urbanisation exacerbates the issue by reducing storage capacity and blocking floodways (Shazwani & Mohamad, 2016; Rabiul et al., 2016; Marini et al., 2014; Zhou et al., 2018). Rapid population growth and inadequate urban planning further increase the vulnerability of urban areas to flash floods (Asadzades et al., 2022; Dodman et al., 2017; Bassama et al., 2022). Flash floods, caused by factors such as severe rain and dam failure, pose a serious threat in densely populated areas with increased runoff from built infrastructure (Nor Ain Kandari et al., 2018; Yahaya et al., 2022). The consequences of flooding include property damage, loss of life, soil erosion, sediment deposition, disruption of drainage and land usage, and structural damage (Rabiul Islam et al., 2016; Zoran Vojinovic and Michael B. Abbot, 2012).

### **Impacts of Flooding**

The floods that occurred in Malaysia in December 2021 and January 2022 had significant impacts on various aspects, as revealed in a special report by the Department of Statistics Malaysia (DOSM) ( Figure 2). One significant effect of floods on the loss of life and injuries is the physical harm caused by the flooding. Floodwater is dangerous due to its fast-moving nature; debris carried along with it, and contamination from various sources such as sewage or chemicals. These factors make it difficult for residents to navigate through floodwaters safely, resulting in drowning or injury.





Source: Special report on Impact of Floods in Malaysia 2021

**Figure 2: The impacts of flooding**

Additionally, flooding can lead to landslides which often cause destruction while blocking evacuation routes. Floodwater can cause a range of injuries, from cuts and bruises to broken bones and drowning. People often try to rescue their belongings or others and get injured in the process. Additionally, flooding can cause infrastructure damage, leading to more accidents and physical injuries. In some cases, the loss of life can be due to a lack of adequate warning systems, improper evacuation procedures, or buildings that collapse due to flooding or water saturation. The flooding and landslides across eight states in December 2021 left almost 50 people dead (Relief Web,2022) and displaced more than 40,000 people (Davies,2021).Property damage was another major outcome, with an estimated cost of RM6.1 billion (USD 1.46 billion) ) (DOSM,2022). Floods resulted in the destruction of homes, vehicles, business buildings, and industrial facilities. Flash floods were particularly reported to cause substantial economic losses worldwide, reinforcing the need for flood-resistant construction methods, elevation of buildings, and appropriate insurance coverage (Dhunney et al., 2020).

In addition to these effects, floods disrupt essential services provided to residents, such as infrastructure, public services, and residential areas (DOSM,2022). Road damage, bridge collapse, and power outages hindered transportation activities and access to basic amenities(Bhuiyan,2021). Contamination of water sources due to disrupted water supply and sanitation facilities increased the risk of waterborne diseases, necessitating strategies to ensure clean water supply and hygiene practices(Said et al.,2018). Additionally, floods had adverse effects on mental health, resulting in psychological discomfort, post-traumatic stress disorder (PTSD), anxiety, and depression among the affected population. The environmental consequences of floods in Malaysia were significant, affecting ecosystems such as forests, wetlands, and coastal areas (Wong et al., 2018). Destruction of these ecosystems disrupted biodiversity, contributed to pollution of water sources, and caused soil erosion and land degradation (Yusoff et al.,2019).

The economic impact of floods was substantial, with costs incurred for infrastructure repair, disruption of economic activities, and financial losses (Abdul-Rahim et al.,2018). Repairing and rebuilding infrastructure posed a significant economic burden for the government and private sectors, diverting resources from development projects(Yusop et al., 2017). According to Mahmood (2020), businesses also are affected by floods, which result in temporary closures, lost working days, and lower output. Small and medium-sized businesses (SMEs) are particularly at risk, negatively impacting employment, investment, and economic stability (Mahmood et al.,2020). Meanwhile, the government incurs high costs for emergency response, relief operations, and rehabilitation programs as part of its vital responsibility for controlling the economic effects of floods (Razak et al., 2019).

## **METHODOLOGY**

In order to carry out this study, there are two approaches to collect data which involve two categories of primary and secondary data sources. For primary data, a survey questionnaire was used to achieve a broader coverage of the research and to give the respondent more time to think about a proper answer. Due to time and cost constraints, the scope of this research is limited to Shah Alam, and the respondents targeted for this research are residents ranging in the area of Taman Sri Muda, Shah Alam. These areas were chosen because they are home to the majority of flood victims.

Based on a source from Department of Statistics Malaysia Official Portal (2021), the population of residents is about 38812 people. According to Krejcie and Morgan (1970), the sample size for a population of 30 000 is 379.However,this sampling method is calculated by referring to the "Small Sample Techniques' ' (Krejcie & Morgan, 1970). From that, a total of 163 sets of questionnaires were distributed to the respondents with 112 of them being returned back, indicating a 60% of the

response rate. As for secondary data, it consists of information taken from journals, articles, relevant websites, previous research papers, etc. that are relevant to the research. These secondary sources are mainly used in the preparation of Literature Review.

## FINDINGS AND ANALYSIS

### Analysis On Objective: To Determine The Causes And Impact Of Flooding To The Flood Victims

There are two (2) main subtopics on this second objective of study which are causes of flooding and impact of flooding to the victims. From the topic causes, it is then divided into two (2) sub-categories namely as natural factors and human factors while for the subtopic impacts of flooding it is divided into three (3) sub-categories namely as individual, communities and economic.

#### 1.0 CAUSES OF FLOODING

This research study divided the causes of flooding into two main categories which are natural factors and human factors. The mean score and rank for each of the factors involved was analysed in the following section.

##### 1.1 Natural Factors

**Table 1.1: Causes of flooding on natural factors**

Item	Description	Mean	Rank
1	I believe that this flooding happens because of heavy rainfall.	4.15	1
2	I feel that there is a flooding happen because of the flash flood.	4.13	2
3	I feel that there is a difficulty in predict about the climate change and it cause to the flood.	4.12	3

The analysis of causes of flooding due to natural factors, as presented in Table 1.1, provides valuable insights into the primary reasons behind flood occurrences. The

findings shed light on the key factors that contribute to flooding, enabling participants to develop effective strategies for mitigation and preparedness. The research identifies heavy rainfall as the primary contributor to floods, coming in top with a mean score of (4.15). In order to develop suitable infrastructure and drainage systems and efficiently regulate water flow, it is essential to understand the patterns and features of severe rainfall occurrences. Therefore, strategies for reducing the effects of flash floods include better stormwater management, early warning systems, and public awareness campaigns. The data also shows that, with a mean score of 4.12, the difficulty of anticipating climate change and its effects on floods comes third. This emphasises the difficulties in forecasting and understanding the complex relationship between climate change and flooding disasters.

## 1.2 Human Factors

**Table 1.2: Causes of flooding on human factors**

Item	Description	Mean	Rank
1	I believe that this flooding happens because of unplan used of land.	4.09	5
2	I feel that there is a flood because of the deforestation and the loss in forest contributes to the worsening floods.	4.25	2
3	I feel that urbanisation activities contribute to occur flooding.	4.16	3
4	I feel that clogged drains also one of the causes because drains that clogged with garbage will disrupts the flow of water and make the flood happens.	4.28	1
5	I believe excessive land use can also cause flooding.	4.14	4

Table 1.2 above shows the list of causes of flooding on human factors. Apparently, there are some factors that contributed to these causes. 'I feel that clogged drains also one of the causes because drains that clogged with garbage will disrupts the flow of water and make the flood happens' (mean=4.28) has been found as the main barrier in economic aspect. Meanwhile, 'I feel that there is a flood because of the



deforestation and the loss in forest contributes to the worsening floods' (mean=4.25) and 'I feel that urbanisation activities contribute to occur flooding'(mean=4.16) comes next to the mean score. Next, the mean score for 'I believe excessive land use can also cause flooding' and 'I believe that this flooding happens because of unplan used of land' is tangible which are 4.14 and 4.09 respectively.

### 1.3 Overall causes factors

Based on research objective 2, there are two (2) main categories of causes of flooding which are natural factors and human factors. The following table summarises the overall causes categories.

**Table 1.3: Summary for overall flooding factor categories**

Item	Description	Mean	Rank
1	Natural factor	4.13	2
2	Human factor	4.18	1

Analysing from factors breakdown for each of the categories respectively, the mean score for the main categories being identified. According to Table 1.3, between the two categories Human factor takes the first rank with a slightly higher mean score which is 4.18. Meanwhile, Natural factor is placed in the second rank with mean score 4.13. Overall view of these barriers, all respondents gave positive feedback for the barriers listed.

## 2.0 IMPACTS OF FLOODING

This research study divided the impacts of flooding into three main categories which are individual, communities and economic factors. The mean score and rank for each of the factors involved was analysed in the following section.

### 2.1 Impacts of Flooding on Individual

**Table 2.1: Impacts of flooding on Individual**

Item	Description	Mean	Rank
1	Loss of life and injuries: Flooding can result in fatalities and injuries, particularly if people are caught in fast-moving water or are unable to evacuate in time.	4.27	1
2	Psychological impact: Flooding can cause emotional distress, anxiety, and trauma for individuals and communities affected by the disaster.	4.27	1
3	I feel that as roads become submerged, motorists will find themselves confronting an impassable barrier, or worse, stranded in the middle of an impromptu river.	4.26	4
4	Damage to property: Floodwaters can cause significant damage to homes, buildings, and infrastructure, resulting in costly repairs and displacement of residents.	4.27	1

Table 2.1 illustrates some of the factors that contribute to individual impacts in flooding events. However, there are three factors that shared the same mean score in the first rank, which are 'Loss of life and injuries' (mean=4.27), 'Psychological impact' (mean=4.27) and 'Damage to property' (mean=4.27). After that, the factor 'I feel that as roads become submerged, motorists will find themselves confronting an impassable barrier, or worse, stranded in the middle of an impromptu river' is the lowest with only slightly different from previous voted factor for this category with the mean score 4.26.

## **2.2 Impacts of Flooding on Communities**

**Table 2.2: Impacts of flooding on Communities**

Item	Description	Mean	Rank
1	I believe many people, especially those living in the lower-lying areas, will find themselves forced out of their homes as houses become inundated.	4.29	1

2	I believe that the heavy rains and flash floods will lead to disruptions in power and communication lines, whether directly (e.g., short-circuiting from water damage) or indirectly (e.g., trees fallen by heavy rain or flood waters may topple onto power lines).	4.29	1
3	I think there will be a food shortage crisis during the flood.	4.29	1
4	I feel that the top management is not highly aware of about community concerns.	3.86	5
5	Public health concerns: Floodwaters can increase the risk of waterborne diseases, and exposure to mould and other toxins can cause respiratory problems.	4.26	4

Table 2.2 illustrates some of the factors that contribute to communities' impacts in flooding events. However, there are three factors that shared the same mean score in the first rank, which are 'I believe many people, especially those living in the lower-lying areas, will find themselves forced out of their homes as houses become inundated' (mean=4.29), 'I believe that the heavy rains and flash floods will lead to disruptions in power and communication lines, whether directly (e.g., short-circuiting from water damage) or indirectly (e.g., trees fallen by heavy rain or flood waters may topple onto power lines)' (mean=4.29) and 'I think there will be a food shortage crisis during the flood' (mean=4.29). Next, the factor 'Public health concerns' is the next factor rank with only slightly different from the previous voted factor for this category with the mean score 4.26. After that, the factor 'I feel that the top management is not highly aware of about community concerns' is the lowest voted factor for this category with the mean score 3.86.

### 2.3 Impacts of Flooding on Economics

**Table 2.3: Impacts of flooding on Economics**

Item	Description	Mean	Rank
1	Damages to business and crops.	4.31	2
2	Lost productivity.	4.18	4

3	Increased costs for emergency responses and repairs.	4.36	1
4	Giving bad perception towards government management that will cause having bad judgement from other country.	4.13	5
5	Environmental damage: Floods can cause significant environmental damage, including soil erosion, contamination of water sources, and loss of habitat for wildlife.	4.24	3

Table 2.3 illustrates some of the factors that contribute to economic impacts during flooding. The respondents agreed on the question 'Increased costs for emergency responses and repairs' (mean=4.36) as they voted this question to be in the first rank. Then, it is followed by 'Damages to business and crops' (mean=4.31) and 'Environmental damage: Floods can cause significant environmental damage, including soil erosion, contamination of water sources, and loss of habitat for wildlife' (mean=4.24). Following, there is fourth rank, which is 'Lost productivity' (mean=4.18). After that, the factor 'Giving bad perception towards government management that will cause bad judgement from other countries' is the lowest voted factor for this category with the mean score 4.13.

## 2.4 Overall impact factors

Based on research objective 2, there are three (3) main categories of impact of flooding which are individual, communities and economic factors. The following table summarises the overall causes categories.

**Table 2.4: Summary for overall impact of flooding factor categories**

Item	Description	Mean	Rank
1	Individual	4.27	1
2	Communities	4.19	3
3	Economic	4.25	2

Analysing from factors breakdown for each of the categories respectively, the mean score for the main categories being identified. Based on Table 2.4, the category of



'Individual' is the highest rank among the other categories. This variable has strong responses from respondents by which they mostly agreed with the questions. Meanwhile, 'Economic' takes the second rank with a mean score of 4.25. The last mean score for impacts category is 'Communities' (mean=4.19). Overall view of these impacts, all respondents gave positive feedback for the effects listed.

## **DISCUSSION**

The objective is to determine the cause and impacts of flooding to the flood victims. This objective was achieved. The questionnaire method was used to identify challenges involved in this research study to form questions in the questionnaires and was distributed to residents in Shah Alam.

### **Causes Of Flooding**

According to the paper's findings of the causes of flooding, both natural and human factors significantly contribute to the occurrence of floods. With a mean score of 4.15 in terms of natural factors, significant rainfall stood out as the main factor (Table 1.1). To create efficient strategies for infrastructure development and drainage systems, it is essential to understand the patterns and features of extreme rainfall occurrences. With a higher mean score of 4.12, the issue of predicting climate change and its effects on flooding further underlines the difficulties in foreseeing and understanding the intricate relationship between climate change and flooding disasters. These findings were supported by Tang, 2019; Ehsan et al. 2022 stating that Malaysia should expect an increase in the frequency of extreme occurrences like flooding, mudslides, flash floods, heavy rainfall, and floods—all of which have already happened in our nation.

On the other hand, it was also noted that significant causes of flooding incidents were human factors. Respondents identified a number of factors as human-induced causes of flooding, including unplanned land use, deforestation and loss of forest, urbanisation activities, and clogged drains (Table 1.2). The highest mean score was given to clogged drains, which emphasises their negative effects on water flow and the likelihood of flooding (4.28). These results highlight the significance of putting in place appropriate land-use planning, forest conservation measures, and efficient waste management systems to reduce the human drivers causing flooding as agreed by Bassama et al. (2022) and Asadzades et al. (2022).

### **Impact Of Flooding**

When it comes to the impact of flooding on flood victims, the analysis identified three key categories: individual, community, and economic aspects. The loss of life and injuries, psychological distress, and damage to property all received the same mean

score of 4.27 for the individual effects of flooding (Table 2.1). These effects show how seriously flooding affects people's physical and emotional health. Floods have a variety of negative economic effects, including harm to crops and enterprises, higher emergency response and restoration costs, and environmental harm (Table 2.3). These elements show the financial cost and environmental effects of flooding disasters. In order to mitigate the financial effects of flooding, comprehensive plans must be developed that emphasise catastrophe risk reduction, company resilience, and environmental preservation.

Overall, the paper highlights the complex relationship between the causes of flooding and its effects on flood victims. It emphasises the necessity of a multifaceted strategy that incorporates both natural and human components in plans for flood mitigation and preparedness. In order to minimise the damaging impact of floods on populations at risk, governments, communities, and stakeholders must collaborate to understand the causes and effects of flooding.

## **CONCLUSION**

### **Causes Of Flooding**

The research on the causes of flooding and its repercussions on flood victims in Shah Alam sheds crucial light on the variables that influence when floods occur and the ensuing implications on people, communities, and the economy. The study's findings show that incidences of floods are highly influenced by both natural and human factors. Significant rainfall stands out as the main source of floods in terms of natural forces, highlighting the need of comprehending extreme rainfall patterns and their connection to climate change. To reduce the effects of heavy rainfall and anticipate how climate change may affect flooding events, it is essential to design effective strategies for infrastructure development and drainage systems.

Next, human-induced causes of flooding, such as unplanned land use, deforestation, urbanisation activities, and clogged drains, were also identified by respondents. The frequent clogging of drains emphasises the significance of putting in place suitable land-use planning, forest conservation measures, and effective waste management systems to lessen the human causes of flooding.

### **Impact Of Flooding**

The paper also demonstrates the major effects of flooding on flood victims in terms of social, economic, and human factors. As important individual effects, it was determined that death and injury, psychological suffering, and material destruction. Flooding has a negative impact on the environment, increases the cost of emergency response and repair, damages crops and enterprises, and other economic effects.

To lessen the financial and environmental costs of disasters, our findings highlight the need for comprehensive policies that prioritise disaster risk reduction, business resilience, and environmental preservation.

Overall, the paper highlights the complicated interplay between flood causes and consequences for flood victims. It points out the significance of using a comprehensive strategy that takes into account both natural and human factors in flood mitigation and preparedness plans. To develop measures that lessen the negative consequences on people at risk and to get a thorough understanding of the causes and effects of flooding, effective collaboration between governments, communities, and stakeholders is crucial.

## **RECOMMENDATION**

There are recommendations for future studies that should concentrate on deepening our understanding of flood management and mitigation methods in Shah Alam and other flood-prone areas in Malaysia. First, examining how well the current infrastructure development and drainage systems function during periods of heavy rainfall would shed light on potential changes or upgrades that may be made to increase their resilience. Investigating the long-term impacts of climate change on rainfall patterns and flood frequency can also aid in the development of proactive measures for climate adaptation. Studying how flooding affects vulnerable communities, such low-income ones, on a socioeconomic level might also help us develop inclusive and equitable disaster management strategies. Lastly, understanding how technology and data-driven strategies, including flood modelling and early warning systems, can help make flood preparedness and response more successful. By addressing these research areas, policymakers and stakeholders can make informed decisions and implement sustainable strategies to mitigate the devastating impacts of flooding and ensure the safety and well-being of affected communities.

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Surat kami : 700-KPK (PRP.UP.1/20/1)

Tarikh : 20 Januari 2023

Prof. Madya Dr. Nur Hisham Ibrahim  
Rektor  
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Cawangan Perak



Tuan,

**PERMOHONAN KELULUSAN MEMUAT NAIK PENERBITAN UiTM CAWANGAN PERAK  
MELALUI REPOSITORI INSTITUSI UiTM (IR)**

Perkara di atas adalah dirujuk.

2. Adalah dimaklumkan bahawa pihak kami ingin memohon kelulusan tuan untuk mengimbas (*digitize*) dan memuat naik semua jenis penerbitan di bawah UiTM Cawangan Perak melalui Repositori Institusi UiTM, PTAR.

3. Tujuan permohonan ini adalah bagi membolehkan akses yang lebih meluas oleh pengguna perpustakaan terhadap semua maklumat yang terkandung di dalam penerbitan melalui laman Web PTAR UiTM Cawangan Perak.

Kelulusan daripada pihak tuan dalam perkara ini amat dihargai.

Sekian, terima kasih.

“BERKHIDMAT UNTUK NEGARA”

Saya yang menjalankan amanah,

**SITI BASRIYAH SHAIK BAHARUDIN**  
Timbalan Ketua Pustakawan

*nar*

*Setuju.*

*27.1.2023*

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