

Climate Change: A Threat to South Asia

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ABSTRACT

This present study delves into the impacts of climate change are different on different region. Various continents across the world and within a specify region has been differently and unequally effected by climate change. Climate change has disrupted oceans and land use, it has shaped inequalities, governance issues and weather pattern. It is also causing marginalization of people across the biosphere and within the states. It has been predicted that, 3.3 to 3.6 billion people are living in such condition and areas which are highly exposed to and vulnerable due to climate change. Not only human but other species are at significant risk as a result of changing weather patterns. It will further threaten the existence of human being on the planet because human and the environment are interdependent. Therefore, management and mitigation policies are essential for curbing it. However, the process of climate change and its risks are becoming complex and difficult to manage, because many hazards are occurring simultaneously and without early information. It is a description research mainly based on secondary sources.

Introduction

Climate is the pattern of weather of a specific area over long period of time which has adapted some regular and fixed feature while climate change is the abrupt and unpredictable variation in the pattern of climate. Climate change is one of the most challenging issues of the twenty first century. The variation in climate is mainly attribute to the human activities. The causes and consequences of climate change is global, and it is not limited to only one country (Webersik, 2010). Climate change has adverse impacts on the lives of the people and it is a serious threat to the security of a state. It has both external and internal implications on the security of Pakistan. Internally, it is threatening the freshwater resources of Pakistan. We know that Pakistan is already water scarce country and climate change is further aggravating the problem. Water scarcity will affect the agriculture of Pakistan. The harsh impact of the climate change on agriculture will have negative consequences on the economy of Pakistan because majority of the population is connected to the agriculture. Increase in temperature is another impact of climate change which can put in danger the basic necessities of life like water, food, and housing of the people. Above all, it is a severe threat to democracy and rule of law (Carrington, 2019). The increasing temperature leads to melting of glaciers as result of which sea surfaces is rising because more water is flowing to the sea. The rise in sea surfaces is putting the Coastal states, like, Karachi which is one of the most populated city in the world, in great danger. The country is already facing so many problems like weak state institutions, population pressure, regional conflicts, and weak economy which is additionally

worsen by, rising sea surfaces, declining water resources, and food crisis (Merky, Daniel, 2011).

Pakistan could become an instable country like the Arab countries, due to the possible impacts of climate change, which emphasis the fact that climate change and security has close relation (Khan, 2015). Climate change is a bigger challenge of the coming times because it is a threat to human lives and it is predicted that developing countries will be more effected by environmental changes. In other words, it leads to political instability of in the developing countries like Pakistan (Selby, 2014). McDonald (2013) has said that climate change has exacerbated the risks and threats to human lives. He further says that researchers have identified threats to the life of people and they are also agree that it is a security threat to the territorial sovereignty of nation's state. Climate change as a threat to the national security of a country is gaining importance in academic circles as well as in practicality. It is causing scarcity of natural resources and it may induce conflict among countries over trans-border water resources. It is not only a threat to the national security of a state, but it also poses danger to human security, international security, and ecological security.

Pakistan has realized the adverse impacts of climate change on the national security of a country. This is the reason that ministry of climate change was established. Moreover, climate change policy was formulated in 2012. Pakistan is among the first few countries who willingly joined the United National Framework on Climate Change in 1992. The national climate change policy outlines the threats to Pakistan national security from climate change. These threats are severe in the sector of water security, food, and energy security (Taal, 2020). Pakistan is a developing country, and it has weak economy. It is located in a region which is badly exposed to the threats from climate change. The variation in climate pattern has adverse social, economic, and environmental effects. It will harm the shelter, health, and food of the people of Pakistan. It has faced some horrific consequences such as human and infrastructure loss due to climate change in the past (Adnan, 2021). It is clear that climate change is a serious issue of the twenty first century and it is becoming an issue of high politics with every coming day. Therefore, it is essential, like oxygen, to take all the necessary steps of mitigating and controlling the problems of climate change so that the horrible impacts of climate change on the lives of the people could be avoided. It may trigger conflict between the provinces on water distribution and food scarcity. Climate change is a great threat to human security as well. It has adverse effects on health of the people. Furthermore, it also causes loss to the national infrastructure as we know that floods and storms is the common effects of climate change. Climate change has impacts on the external security of Pakistan as well. The most prominent impacts of it would be on the already souring relations of Pakistan with the neighbor countries like India and Afghanistan who are using various means to stop the water flowing toward Pakistan, where the water resources is already scarce. It is obvious that Pakistan will use its full potential for receiving its share of water. This is the reason that some scholars have mentioned the threat of climate change to such an extent that, it could turn into an existential threat for Pakistan. In simplistic way, it can be interpreted that climate change is a serious threat to the security of Pakistan.

What is climate change?

The term "climate change" is vague and has been interpreted by different communities in various ways. It is a complex and controversial process. The term become problematic sometimes and therefore it is significant to define the term in proper way. It is necessary that the definition which we attribute to climate change, be empirically applicable. The further criteria for the definition of the climate change are that it should be applicable in the past, present and the future. Moreover, It should be mathematically applicable and well defined (Werndl, 2015).The first convention on climate change was held in 1992. This meeting was given the name of United Nation Framework Convention on Climate Change (UNFCCC). It was the first meeting which aware the nations about the appalling effects of climate change. It has defined climate change as the following.

“Climate change” means a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods”. (Nations, 1992).

The Intergovernmental Panel on Climate Change in another body which scientifically assess the process and it has defined climate change as,

“A change in the state of the climate that can be identified (e.g., by using statistical tests) by changes in the mean and/or the variability of its properties and that persists for an extended period, typically decades or longer. Climate change may be due to natural internal processes or external forcing, or to persistent anthropogenic changes in the composition of the atmosphere or in land use” (IPCC, 2012).

The variation or the change in climate occur due to activities of humans. This is a narrow definition. In contrast to this definition, made by UNFCCC, the Intergovernmental Panel on Climate Change (IPCC) have a broader definition of climate change. It has defined climate change as the variation in climate over time, weather it is due to human activities, or it is natural. Hence the causes of climate change may be both human induced or natural (Peilke, 2004).

Climate is the term which we hear most of the time. It is the pattern of weather of a specific place or region. Each region and country have its own season. It means that every region in the world has its own climate. Depending on this climatic condition, people have its own way of living, eating, and dressing. Climate is the usual weather of a country or place. Hence, the term Climate Change means the change or the variation in the usual weather of a specific place. In broader term, it is the change in the climate of earth which could have taken millions of years to occur. History shows that once there was a time when the temperature of the earth was very cold and also a time when it was very hot. The current situation shows that climatic variation occurs and that the earth is warming (NASA, 2014). Climate is the average weather of a region considered for a long period of time and the change in this weather happened over many years is termed as climate change (BBC, 2021). Arthur. M. Michelic (2017) has defined climate change as the shift in the statistic of weather over a long period of time. For instance, from one decade to another. It is not a good phenomenon because climate change brings many detrimental effects on the life of people. However, there are many people who do not take it seriously and claim climate change as a political conspiracy or hoax and the reason is that people have lack of scientific knowledge. The IPCC (IPCC, 2022), in its 6th assessment report has stated that the changes induced by climate change has multiple impacts on the lives of people and on natural ecological system. The report has clearly mentioned that climate change is human induced. These changes is a major obstacle in achieving the Sustainable development Goals. Moreover, It is disrupting the economic system, social system and has adverse impacts on the health of the people. The major change problem caused by climate change is heat wave. It has killed many people and it is causing disease and other health conditions in many parts of the world.

Why climate change occurs?

It has been mentioned above in the definition of climate change, that human is responsible for global climate change. Majority of the scientist are agreed that the expansion in greenhouse gases (GHG) due to human activities is causing the change in the pattern of climate. We know that heat flow from sun to the earth during day time. Some of this heat is absorbed by earth and other bodies while the remaining heat travel back into the space. However due to concentration of Greenhouse gasses above the earth, the heat wave is blocked in the lower part of the earth, as a result of which the temperature of the planet is increasing. Greenhouses gases like methane, water vapors, and nitrous oxide, carbon dioxide and chluorofluoro carbons (CFCs) are the main cause of it (NASA, n.d.). The gases which is famously called

GHG is produced by burning coal, oil and natural gases. In addition to that, the destruction of forests, removal and destruction of carbon rich soil and the manufacturing of cement from limestone are some of the causes of production of GHG. The process of the production of these gases is caused by human activities. This is also called anthropogenic causes of climate change. Scientist believed that the increased emission of gases like carbon dioxide is causing the rise in temperature, and it causes global warming. It is still a question that who much of the current global warming is caused by human activities and who much is caused by natural process. It is essential to find out the answer for this question so that the human activities could be controlled (Pittock, 2005).

There is a need to lessen the emission of gases in the atmosphere. Because the increasing concentration of gases in the air is causing the earth warmer which will be difficult for living in the coming years. The burning of fossils fuel is adding in the harmful gases in the atmosphere. The most harmful gas among the greenhouse gases is carbon dioxide. More interestingly, carbon dioxide itself is not a problem but the increase in temperature and the warming of the earth due to carbon dioxide and other gases is making the issue worse. The extra heat which is trapped by GHG is causing the climate change. It is not necessary that all the changes in the climate is caused by global warming. Climate change is a complex process. However, it is understood that the effect of climate change will be disastrous. Therefore, it is essential to bring the carbon emission to zero level. Zero level means to reduce the emission to a minimum level (Gates, 2021). The relation between increasing temperature, Green House gases and climate change can be understood by assuming the example. The greenhouse gas work like a blanket which keeps the earth warm. In case of absence of these gases, the earth will be very cooler. As you know that the concentration of gases in the air, helped in thickening of this blanket, which further has the effect of warming the planet earth. By, controlling the emission of the harmful gases, will keep the thickness of the layers or blanket normal. This will be maintaining the temperature of earth at an optimum level. The burning of fossil fuel is the main cause of production of the detrimental gases. Coal contributes, 41 % in the production of Carbon dioxide gas while oil contribute 39 % in the production of carbon dioxide gas. Natural gas adds 20% in the production of this harmful gases which is more efficient in contrast to the other fossil fuels like coal and oil. Keeping this in mind, the reduction in the emission of carbon dioxide has the result of reducing the effect of global warming (Feng, 2008). The temperature has increased 2 degrees Celsius as compared to the preindustrial era due to global warming. There is much talking about climate change however, little efforts has been made to mitigate it. Hence, it is the need of the hour to think about the ways of containing the threats of climate change. The earlier we accept climate change as a challenge, the sooner we will make the earth worth living for the coming generations (Parry, 2008). It is a fact now, that climate has changed. It will further vary in the future if the factors like, deforestation, increased industrial and agricultural use and the usage of energy, is not controlled. Consequently, there will be more droughts, heat waves, floods and storm. There will be more chances of suffering of nature. The increased in temperature may be linked with the factors like economic growth and population growth. The rise in temperature has the consequences of variation in the climate pattern which have negative influences on food production, water, health and sea level. In addition to that, there will be infrastructure loss and the problem of settlement and shelters. In short, the tremendous alterations in the climate will severely affect the developing countries (Metz, 2010).

Security; A Conceptual Analysis

The title of this thesis is climate change and security. Therefore, it is necessary to define security and understand it. It is essential to define the term, security because conceptual understanding help in making the meaning of security easy which will further help the policy makers and the readers. The idea of security is a contested topic. It is compulsory to define security because no concept has been so abused and misused than the concept of security. It is therefore, vital to define security in such a way which can make it easy to compare it with

other concepts and gasping it differently because the concept of security is multidimensional. (Baldwin, 1997).

Arnold Wolfers in *National Security as an Ambiguous Concept* (1952) has explained that security is nothing but the absence of insecurity of evil or the absence of negative values. The values are important because people put their lives in danger or even sacrifice themselves to protect these core values. For example, the protection of national independence and national unity of its territory. Moreover, People need security from external and internal violence. The writers further evaluate that the problem with security is that it carries a range of goals. Sometimes the idea of security become a normative question by defining it as protection of values. Hence security can be understood as the protection of values from any kind of danger and to preserve the values when it is in crisis and in difficulties. The objective definition of security become easy by explain it as the absence of threats to the core values. The subjective definition of security can be linked to the idea of security, as the absence of fear of an individual that the core values cannot be attacked. Hence the idea of security is important with respect to both objective and subjective level conceptual analysis. Security has many dimension. Firstly, it a mean for the protection of some higher goals or ends. Secondly it can be treated as an end. Thirdly, it takes the form of avoidance of dangers. Beside the subjective and objective construction of the idea of security it is important to think about the internal and the externals security. The idea of internal security arises at the moment when there is a danger to the values or lives of the people, from domestic population or domesticity conditions. The primary meaning of internal security is the absence of danger to the social order of a country. The idea of external security refers to the safety of people or states from the threats or crimes outside the border of a country. The characteristics of security also differ with the change of factors like state, private or civil society.it is clear that security is a complex idea therefore it need a comparative analysis. Moreover, it carries different meaning and different constructions (Zedner).

Buzan, in *Power, Peace and Security, Contending Concepts in the Study of International Relations* (1984) explained that earlier the concept of security was not considered important even to include it in the study of International Relations. The primary attempt was made by Jhon Hertz who develop the concept of security. Insecurity is a common problem at every level of understanding, weather it is individual level or global level. The degree of insecurity can vary from cultural to economic, and from political to military level. Barry Buzan, further wrote that the concept of security is more helpful than peace and power, for understanding the problems of International Relations. Similarly, Barry Buzan in another magnanimous work, *People, State and Fear; National Security Problem In International Relations*, (1983) for the first time introduced the idea of national security. The security of individual means to secure from threats, feel safe and to be free from any doubt. The understanding of security become easy by linking it to the idea of threats. For example, security against the threats of disease and poverty. The idea of individual security is the security from social threats. These social threats are physical threats, economic threats, threats to right and threat to position and status.

The Idea of Non-Traditional Security (NTS) Threats

The above section introduced the concept and idea of security. Those definitions were mostly related to tradition security threats. Traditional security threats are those threats which are seen through the lens of survival of states. Saying it differently, traditional security threats are related to the military conflict between states. Non-Traditional Security threats or contrary to the tradition concept of security. Nontraditional security threats refer to the threats from terrorism, environmental degradation, climate change, crimes, disease, and illegal migration (Jones, 2013).

Barry Buzan, Ole Weaver and Jaap de Wilde, in his marvelous book, *Security; A New Framework for Analysis*, (1998) has revolutionized the concept of security. They argue that there are two views of security. The one is earlier, traditionalist and state centric view of

security. This is narrower concept of security. The other concept of security, which is non-traditional is a wider concept of security. These non-traditional threats are military as well as non-military. The sector of security is military security which is a traditional view of security. The others are important sectors of security like environmental security, which is an ultimate security, in view of some scholars. These include, the degradation of ecosystem, energy problems, economic problems, foods problems and civil strife. The other sector of security is economic security and societal security. Societal security includes migration, poverty and problems like unorganized crimes. In addition to that political security is another important sector of security in the view of Barry Buzan and his Co-authors. This view of security contains wider agendas and topics of security and threats to individuals. As we know that the traditional view of security is state centric. Many scholars have objected this narrative of security and have introduced the idea of human security. Human security is individual centric. It is human centric. It sees the threats like famine, droughts, floods, disease, plagues enslavements, as a problem to the survival of human. Moreover, the idea of human security is not limited to one country or community, it is universal. There are seven dimensions of human security,

1. Personal security
2. Economic security
3. Community security
4. Environmental security
5. Health security
6. Political security
7. Food security.

Human security has narrow down the concept of security from nation to individuals. Issues like food and environmental degradation are nonmilitary security threats. (Alkire, 2003).

There are many new concepts of security has emerged with the changing time. These are critical security studies, the Copenhagen school of security studies and the human security idea of security studies. These school or thoughts of security studies looks on the dimensions which separate the sphere of security from traditional idea of security. They have created the horizontal and the vertical conception of security studies. For example, who is to be secured and what is to be secured and that there are other threats outside the domain of military threats. The schools of security like Copenhagen school, human security studies and critical security studies were initiated because the traditional idea of security was not enough (Rebecca, 2012). The modern security landscape is transnational in nature. It is not bound to one region, community, or state. The non-traditional threats like AIDs, Ebola and SARS have implication for the health people as well as no the national security of a sate. Crimes have crossed the boundaries and has become transnational which has crossed the geographical boundaries. Globalization has changed the dimension and landscape of security. Issues like health security, food security, energy security and economic security has made the concept of security interrelated and complex. These are not simple threats, but it has highly unpredictable and accidental consequences (Masys ,Anthony.J, 2016).

There are unanticipated events like floods, disaster, earthquakes, financial crisis, pandemics, and cyber-attacks, that has serious consequences and impacts and raises a question mark on the weakness, fragility and vulnerabilities of the system such as societal system, economic system, technological system as well as ecological system. These threats are shaping the risk and security agendas. These complex and interrelated threats, like political, economic, health, food, personal, community and environmental problems, is bigger threat to the traditional notion of security. The alarms to the world due to natural as well as manmade hazards, create a link between the mentioned nontraditional security threats. For example, when a pandemic Ebola break out, it raised a serious threat as a result of which borders were closed, migration was stopped. Beside this, food security and health security was challenged. Environmental security is gaining importance because disaster weather it is man-made or natural has local as

well as global effects. Climate change is not only a threat to the peace and security of a nation state, but it is also a threat to the peace and security of international system (Anthony, 2016). The idea of human security provides a new framework in the security studies. Non-traditional security threats are a serious security problem and therefore it is required to mobilize a relevant audience and to portray these NTS as a security threat. It is essential to enhance public opinion on such topics and to mobilize state power for containing these threats. Moreover, the Copenhagen school urges us that when and how to recognize an issue as a security threat and when it is to be perceived as an existential threat (ACHARYA, 2006). Nevertheless, NTS threats have some common features. One is that it is transnational in character. Sometimes it looks domestic and sometimes it adapts the character of interstate danger. Additionally, it expand very easily due to globalization and communication. The distinguishing feature of the NTS threats is that it needs international cooperation as well as it also challenged the state internally and compel it to insure domestic reforms. For instance, NTS threats is seriously challenging the security of Central Asian States. The water resources are rapidly declining in the Central Asian region. It is estimated that the Aral Sea will dry in the decade. Furthermore, climate change and conflict have close relation. Climate change, as NTS threat have serious and negative implication on the security of developing states (Kim & Blank, 2012).

Relations between Climate Change and Security

In the above section, the concept of climate change and security has been thoroughly introduced and discussed. It is, therefore of immense importance, to go deep into the relation between climate change and security so that we could understand the impact of climate change on security. The politician or the scholar who believe that climate change is a threat to the stability and political order of a country is not new. It is old enough, when in 1980, the US Naval War College studied the issue, as a threat. The US defense department, private organizations and think tank take interest in it and accepted that climate change has deep and negative impact on stability of a country. It is evident in some parts of the world, like Somalia and other African countries that, the struggle for scarce resources is causing conflict in these states. The resources scarcity is caused by climate change. Expert have already raised concern about climate change and national security. The idea that climate change and global warming is increasing the tension between nations, and it is also causing ethnic conflict within the nation. Some scholars have blamed climate change as a direct cause of conflict and tension between states (Liberman, 2019).

The 2019 US Intelligence report claimed that environmental degradation and climate change is a serious threat to the security of the world because it is shaping competition for resources like economic worries and social problem in the coming years. The report, written by scientist and national security advisor have accepted that climate change is a threat to the security of US. The troubles which are created by climate change has confronted the economic prosperity and is causing calamities like droughts, water security, food security and health problems (Benerjee, 2019). It is not only the US which has identify climate change a threat to national security but recently, Germany has also announced that climate change is a national security threat. It has made the problem of climate change a priority of Security Council. Climate change work like a catalyst. It worsens the problems. It need a timely response and it is not fair to waste the time. Science should play its role and there is a need of multilateral diplomacy to address the security risks of climate change (Austin, 2019).

Climate change is a serious threat to the economic prosperity various nations has achieved as well as it is a threat to human being. For example, the 2003 heat wave in Europe, caused 15-billion-dollar loss to the agricultures sector and also caused 35000 deaths. Global environmental problems caused by global warming has alarming consequences not only for the living condition of people, but it also damage the infrastructure. Going deep into the history of climate change and environmental degradation, scientist has evidence that many civilizations were destroyed by climate change because they have no or little adaptation

strategies and policies. For Example, the Bronze Age, spreading from the Mediterranean to the Indus valley and the Maya Civilization in Southeast Asia were destroyed by environmental changes (Scheffran, 2008).

Climate change has relations with the national power of a country too. It is affecting all those variables which are defining the national power of a nation state. Variable like geography, population, military, economy, resources and many other such factors are badly influenced by climate change. It is therefore clear that climate change effect all these mentioned variables and many other factors, which indirectly have outstanding impact on the national power of a country. Climate change enhance violent conflicts. It is exacerbation the cause of population displacement and migration. It is increasing the vulnerabilities of people to disaster. In other words, it is disrupting, those programs which are helpful for poverty elevation. It is clear from all these discussions that climate change has close connection with the national security of a country (Mathew, 2011).

Climate Change and South Asia

South Asia consists of eight states. These are Pakistan, India, Nepal, Bangladesh, Bhutan, Sri Lanka Maldives, and Afghanistan. The region is surrounded by mountain ranges like, Himalaya, The Hindukush and the Karakoram. The region has some important rivers like the Indus, The Brahmaputra, and the Ganges (Bratanica, 2022). According to the Asian Development Bank report, South Asia is extremely exposed to the vulnerabilities due to climate change. It is estimated that between the year, 1990 and 2008, more than 750 million people were troubled by one type of disaster caused by climate change. It effected nearly 50 % population of South Asia. It is does not stop here. The report, claim that 230,000 deaths were reported due to climate change. Above all, it caused 45 billion economic damage to the region. Bangladesh and Nepal were harshly affected by climate change. But the share of India was more than these countries due to its larger size (ADB, 2008).

The vulnerabilities which are posed by climate change to the South Asian region is clearly visible. The rising sea level which is caused by climate change and increasing temperature is threatening the coastal state like Bangladesh, Pakistan, Sri Lanka, and India. The other state in South Asia, which are land locked, like Afghanistan, Nepal and Bhutan suffer from rising temperature. The economic losses due to the negative impact of climate change may cause 13 percent loss to the GDP of this region, by 2050. The states like Pakistan, India and China may go to war and conflict over water because they have a share water resources. It is said that climate change, will be the main source of instability in the region comprising South Asia. The migration, induced by climate change, from rural areas to the urban may cause confrontation over the resources which can lead to radicalization by depriving some population with the basic necessities of life (Kugelman, 2021).

South Asia is seriously exposed to environments catastrophes. In the previous decade, the effect of these changes were so immense that nearly 700 million people were affected by only one event related to climate change. It is predicted that 800 million people will be impacted by 2050, and that it will add into the economic worries of the region. In a clear word, economic loss of 149.27 billion dollars was calculated, from 2000 to 2017, caused by hazards related to climate change. Global warming and climate change has influenced the pattern of monsoon rainfall in the region. Therefore, it is urgent for the region to adopt unite policies and work together to build resilience and mitigation policies against the evils of climate change (Fallessen, Khan, Tehsin, & Abbhi, 2019).The SAARC (South Asian Association for Regional Cooperation) countries is facing a harsh weather condition due to climate change. Maldives may disappear and the reason is the rising sea level caused by global warming. National boundaries cannot stop the menace of evils like floods, catastrophe due to heat waves and droughts and water shortages. Glacier in the region is also melting. The South Asia Nations like India and Pakistan should forget their differences and they should work together and in a coordinated way to jointly manage the climate crisis (Naqvi, 2021).

In the end, it is clear from the above all discussion that climate change is a clear threat to the security of any country. There is various version of security. Climate change is a non-traditional security threat. It is transnational in character and national boundaries cannot build a barrier to the hazards caused by climate change. The following is a brief discussion about climate change profile of South Asian nations.

2.6.1 India

India is the largest country in South Asia with respect to territory and it is second largest country with respect population in the world. It is the third largest emitter of carbon dioxide after US and China. It is one of the most effected countries due to climate change. It is the 7th country, which is immensely exposed to climate related risk according to 2019, climate risk index. The frequency and intensity of drought in India, from 1947 to 2016 has increased significantly. The climate induced changes, like Cyclone Amphan, in India displaced 13 million people and resultantly a damage of 13 billion to the national economy. Furthermore, India is one of the 17 water scarce countries in the world. The ground and surface water resources is gradually decreasing in India which is a grave issue for such a huge population. Temperature is rising and intensity and frequency of occurrence of heat wave will intensify in the coming time in India. The population of India is increasing and the urbanization will also lead to flood other related disasters (Singh, 2021). Temperature is increasing and millions of people are effected by the current heat wave which will intensity in the future. Extreme conditions and patterns of weather has been observed this years, like cold, heat, drought and floods, induced by climate change. It is effecting health of the people as well as their economy. The impacts of heat is seriously damaging the agriculture sector and effected the wheat production. India should formulate a policy to mitigate and control the hazards caused by climate change (Kajal, 2022).

Bangladesh

The globe is warming day bay day due to anthropogenic activities and the consequences is that climate is the change and variation in climate pattern. Bangladesh is located in South Asia and the major part of its economy is coming from agriculture which is making 20 percent of the national GDP, in addition to 65 percent of labor who is busy in agriculture sector. Due to climate change, loss of millions of hectare of land occur which is effecting the livelihood and socioeconomic condition of millions of people, causing food insecurity. The availability of water, food and energy is decreasing which leads to food instability. Climate change is exacerbating and multiplying the problems mentioned above by eroding the agriculture and access to water (Hussain & Majumder, 2018). Bangladesh is a coastal country surrounded by water and it is another south Asian national which is facing the looming threat of climate change. Beside floods, the effects of climate change is severe in these country where disease like respiratory problems, mosquito born disease like dengue and other mental and psychological conditions are common. The summer pattern is getting longer, heat is also increasing in winter and the pattern of monsoon rains is changing and going unpredictable due to climate change (World Bank, 2021).

Nepal

Nepal is located in South Asia and is landlocked country sandwiched between china and India. It is a mountainous country covered by chain s of Himalaya. It is inhabited by nearly 80 million population where 80 percent are living in rural areas. Like all other South Asian counties, 25 percent of GDP of Nepal is coming from agriculture sector. The poverty level is 28 percent and 8 percent of Nepal population is malnourished according to an estimate. Water is in abundant and forest is covering a major portion of the country. However, in the recent years, a continuous wave of floods, soil erosion, droughts and landslide events has been observed, which has put the lives of people in miserable conditions. Nepal is under the horrible impacts of climate change and according to Asian Development Bank, it will lose 2.2 percent of GDP every year due to climate change by 2050. The country is continuously getting warmer and was ranked 31st according to the INFORM risk index 2019. The

estimated population effected by river flood is 157000 people and the loss to GDP is 218 million according to an estimate. Climate change is undermining food production in Nepal, directly or indirectly. In addition to that, disease, poverty and hazardous vulnerabilities is damaging the lives of the people (Bhandhari & Bronkhorst, 2021).

Maldives

One of the many impacts of climate change is the rise in sea surfaces and Maldives, a small island, situated in South Asia, is on the brink of destruction. It is said that it will sink into water due to rising sea surface. It is the sixth smallest country in the world mostly consisting of small islands. According to the 2019 data, its population is 533000 and its mains source of economy is tourism. It is gradually facing high temperature and the scourge of heat wave. Floods, tsunamis, cyclone and storms, which occur due to environmental changes, are causing high damage to the national infrastructure. There are only few fresh water sources and the people rely on rain water for drinking purposes. To mitigate and manage the crisis of climate, the government is focusing on various policies and initiative. The key area is to enhance the connective through transport and infrastructure which is vital in case of natural hazards. It is heavily dependent on importing food item because agriculture play minor role in its economy due to less cultivable land and lack of fresh water resources. It is therefore significantly important to mitigate the challenges posed by climate change (Bhandari & Bronkhorst, 2021).

Myanmar

Myanmar share in world carbon emission is low, however, its exposure and sensitivity to climate change and it impacts is high. It is trying to become a climate resilient country till 2030, to mitigate the harmful impacts of climate change. The country is locating in South Asia and share border with India, Bangladesh, Laos, Thailand and China. Nearly half of its land is covered by forest. It has a pattern of season ranging from cold winter to hot summers and rainy seasons. Climate change has serious and negative implications on development in Myanmar. It was ranked the world second most vulnerable country to climate changes in 2015. Climate change will hamper the process of achieving sustainable economy and social development, like human health, socioeconomic condition of the people and their wellbeing along with education. Agriculture is its second largest source of economy which is facing the threat of climate change. Therefore, it needs new technology for reducing the losses and making the agriculture sector climate resilient. Resources like water, land, biodiversity, forest, marine and other natural resources are important for maintenance and sustenance of life but it is going to diminish and disappear as a result of increasing harmful impacts of climate change (Myanmar Climate Change Strategy, 2019).

Sri Lanka

Sri Lanka is a small island in Indian Ocean, covering an area of 65000 square kilometers approximately. Both mountainous and coastal areas can be found in the island. It has warm and wet climate which is suitable for forest growth and it is said that once, the whole area was covered by forest. However, two third of this forest have been cut down for accommodation purposes. Unfortunately, the island is under the threat of climate change. Its agriculture and food production where the rice is the main crop is facing the danger of climate change which has both direct and indirect effects. The direct effects of climate change on agriculture in Sri Lanka could be the variation in precipitation, temperature and carbon dioxide availability. Decline in water resources, soil erosion, changes in weather, pests and other disease, provoked by climate change will affect the agriculture sector indirectly. Human beings can tolerate a temperature of 35 degrees centigrade and any temperature above this figure is fatalistic for human beings, meanwhile the global torture is rising as a result of greenhouse gases emission in the atmosphere, which is increasing the chances of heat wave. Hence the chances of heat related mortality increases. It also helps in the development of vector born and water born disease, for instance the dengue fever. Furthermore, sea level rise

is another phenomena occur as result of climate change, is a severe threat to the coastal state like Sri Lanka (Brohnohosrt & Bhandari, 2020).

Afghanistan

Being a member of South Asian for Regional Cooperation, (SAARC), it is important to look into the climate condition in Afghanistan. The country has a long history of war and presently, it is under Taliban rule. Since they have taken control of Kabul, the country is facing sever humanitarian crisis, beside economic, health and governance issues. The country is rapidly becoming food insecure and it is said that 9 million people are on the brink of extreme starvation. In addition to that the crisis is further worsen and deepened by the catastrophic challenges of climate change. It lacks proper infrastructure to cope with climatic changes and hence it is the most vulnerable country exposed to the disastrous impacts of global warming. Interestingly, climate change can provide an opportunity to engage with the Taliban regime because it is an issue which is depoliticized and effect everyone.

Conclusion

The whole discussion concludes that the rising threat of climate change and its impact on various states are alarming. All the states must have counter strategy to meet the challenge otherwise the threats can cause chaos in coming years for the people of this region

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