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# Climate Change and Its Impact on the people of Nepal

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Abstract

Nepal and its people are in danger due to climate change. There are 14,253,551 men (48.87 percent) and 14,911,027 women (51.13 percent) among the 29,164,578 people living in the nation. Nepal is exceptional in terms of biodiversity due to its climate, which varies from subtropical to tundra within 150–200 miles. Climate change is having a greater influence on the area's biodiversity, from plant germination to communities that have been living in different climatic zones. The main objective of the research is to ascertain how the general population views the consequences of climate change. The study used a mixed methodology, and information was gathered from people living in different climate zones using Google Forms. There were 16 variables to identify the concept and impacts of climate change. Altogether, 29 people responded.

The responses were transferred to the sheet and fed to SPSS to analyze the data. The analysis found that 100 percent of respondents knew about the issue of climate change and its impacts in different sectors. The average mean found was 1.9025, which indicates the load value of the Likert scale given 1 to the largest scale and 5 to the lowest scale, which indicates 1.9025 < 2. The result found was less than 2, indicating that climate change has heavily impacted the people of Nepal. Industrialized and industrializing countries are responsible for increasing the surface temperature of the earth; their responsibility is to maintain the earth's temperature below 1.5 degrees C, and they should support the developing countries to prepare the people to cope with the rising temperature, including their capacity building.

Keywords: climate change, impact, perception, resilient approach.

Conflict of Interest: The research was not financed by anyone, and there is no conflict of interest

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#### Introduction

Climate change is putting Nepal and its people at risk. 'Of the country's 29, 164, 578 residents, 14,253, 551 men (48.87 percent) and 14,911, 027 women (51.13 percent) are female' (CBS, 2021). 'Nepal is a landlocked country located in South Asia, with China in the north and India in the south, east, and west. The country occupies 147,516 sq. km of land 'and lies between approximately '26°22' to 30°27' N and 84°.04" to 88.12'E' (NTB, 2023) & (Acharya, 2008). Nepal's climate, which ranges from subtropical to tundra, makes it unique in terms of biodiversity. UN General Secretary António Guterres visited Nepal in October last week and the Annapurna Base Camp on October 30, 2023. He witnessed the impact of climate change in the Himalayas of Nepal. He said in his video message recorded by the UN, 'his gist of saying of the message was due to glaciers melting and ice sheets have occurred due to unprecedented temperature rise.' "Nepal has lost close to one-third of its ice in just over thirty years. Melting glaciers swollen lakes and river flooding, sweeping away entire communities, and seas rising at record rates and threatening coastal communities across the globe and gaining speed" (News, 2023). "Nepal alone is home to eight of the world's ten tallest mountains, including Mount Everest (8,848 m). Apart from the mountains, deep gorges, river valleys, and flat lands, it offers a unique assemblage of very different habitats and a high level of biodiversity in a small geographical area. The country's 118 ecosystems support more than 2% of the world's flowering plants, 3% of the pteridophytes, and 6% of the bryophytes. Similarly, the country is home to 3.9% of the world's mammals, 8.9% of the world's birds, and 3.7% of the world's butterfly faun" (Prakash Kumar Poudel, Bishnu Prasad Bhattarai, and Pavel Kindlmann, 2015). Similarly, 4% of mammal species on earth—11 of the world's 15 families of butterflies (more than 500 species), 600 indigenous plant families, and 319 species of exotic orchids' (Caltech, 2023 are found in the land of Nepal.

Nepal, also known as the 'Water Tower of South Asia', 'the water flows from its 6,000 rivers, which are either snow-fed or dependent on rain. The perennial rivers include the Mahakali, Karnali, Narayani, and Koshi rivers, all originating in the Himalayas. Medium-sized rivers like Babai, West Rapti, Bagmati, Kamala, Kankai, and Mechi originate in the Midlands and Mahabharat range' (NTB, 2023)



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#### Problem statement

Nepal has been significantly impacted by the climate change, but most people are ignorant of these consequences, which has made it difficult to build resilient communities. Nepal has seen the consequences of climate change in many facets of daily life. In order to create suitable, resilient policies and activities that would equip the populace to withstand the effects of climate change, it is vital to comprehend these effects.

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**Objective:** The objective of the study is to determine on how individuals perceive the effects of climate change and identify the areas where people felt the impact of climate change in Nepal.

### Methodology

The study is designed with the approach of a convergent method of research, which is quantitative and qualitative. In the qualitative, an open-ended question was asked on the issue of climate change, and its impact was also identified from the literature review.

**Sample size:** The research used convenient sampling and open-ended sampling, both approaches used by the application of Google Forms all together 50 questionnaire were sent, only 29 received within time stipulated 15 days. An email questionnaire was sent as the first approach, and a Facebook questionnaire was sent as the second approach. In the public domain, the restriction on providing email was omitted.

Analysis approach: Google Forms provides the basic forms of the responses, and the answers are transferred to Excel and SPSS for further analysis. Percentage, median, correlation in different variables, and p-value were looked into for statistical analysis. There were eight responses posted within a short time. At least 30 responses are expected by the use of both domains. The time limitation sets it for 15 days; whatever responses are received was analyzed.

### Literatures on Climate change and its Impacts

Climate change is not only the local phenomenon since 'it is being caused by the exponential increase of greenhouse gases such as CO2 in the atmosphere. It has an impact on forestry, agriculture, human health, biodiversity, snow cover, and ecosystems ranging from aquatic to alpine and there are three main greenhouse gases CO2 ,CH4, and NO2 that account for nearly 88% of global warming (Malla, 2008)'. These GHG have been producing by the industrialized countries and added China, India and Brazil also in the list, these are industrializing large counties. 'In the figure below There are 10 countries with most greenhouse gases emissions from 1850 to 2021 and it is measured in millions of metric tons of carbon dioxide equivalent and these gases includes CO2, CH4,N2O, HFCs and PFCs' (World101, 2023)



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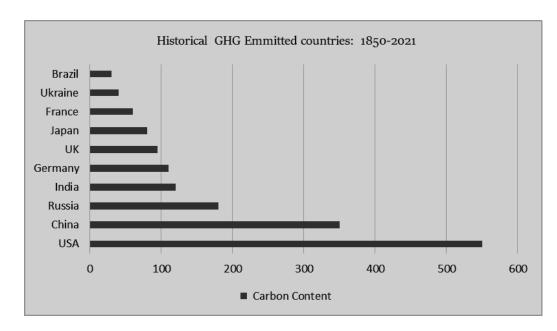


Figure 2: Historically 10 countries were producing most GHG

If we look at the world meter on most GHG emitting countries the first comes China next USA, but China has been reducing highly in comparing to USA. Nepal at the point of time 0.02 % CO2 producing list and world meters no- 114. Chinas per capita emission 7.44 and USA 15.32. It has showed that the GHG produced in high-level from industrialized countries Figure 1: Ref. https:// and 'climate change can be measured in a variety of co2-emmissions-by-country ways, reflecting distinct dimensions of change with unequal spatial patterns across the world. Polar cli-



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www.worldometers.info/co2-emmissions/

mates are projected not only warm, but also to shrink in area' (Raquel A. Garcia, & et.al., 2014). The article explained the impact will be different according to the geographical areas. The polar has been shrinking the land also by the effect of the global warming. 'While changes between localities can have positive or negative effects on the size and location of species' ranges, climate changes at the locality level are frequently linked to demographic threats and opportunities at the population level' (Raquel A. Garcia, & et.al., 2014). Climate change poses uncertainties to the supply and management of water resources. The Intergovernmental Panel on Climate Change (IPCC) estimates that the global mean surface temperature has increased  $0.6 \pm 0.2$  °C since 1861, and predicts an increase of 2 to 4 ° C over the next 100 years. Temperature increases also affect the hydrologic cycle by directly increasing evaporation of available surface water and vegetation transpiration' (Kumar, 2012).



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'Precipitation increases when the global warming increases "the global average increases (as does that of evaporation), the larger the warming, the larger the increase" ( J.F.B. Mitchell; S.Manabe, V.; & T. Toioka J.F.B., 2023 Retri.).

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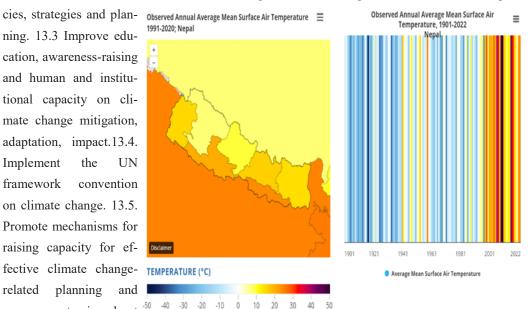
"Global warming will primarily influence economic growth through damage to property and infrastructure, lost productivity, mass migration and security threats. The balance between winners and losers turns increasingly negative as temperatures rise" (Keith Wade, and Marcus Jennings, 2016).

A study was carried out in 2021 according to the study 'The population should be aware on the impact of the climate change, 15% of the working population concerned on the issue of climate change, if added some general population it may decrease. 'Known the difficulties and problems, it appears that Nepal has not had a major impact on climate change; nevertheless, there undoubtedly has been a substantial impact on a number of areas, including agriculture, biodiversity, water supply, energy production, conservation, and the livelihoods of millions of people' (Jyoti Koirala & Nimanada Rijal, 2021).

### SDGs and Climate Change

Sustainable development goals to combat with the climate change, these are from the SDG goal 13, and they are mentioned as "13.1. Strengthen resilience and adaptive capacity to climaterelated hazards and natural disasters. 13.2. Integrate climate change measures into national poli-

ning. 13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact.13.4. Implement UN the framework convention on climate change. 13.5. Promote mechanisms for raising capacity for effective climate change- TEMPERATURE (°C) related planning and management in least



developed countries and Small Island developing States, including focusing on women, youth and local and marginalized communities (UN-SDGS, 2023 Retri.). SDG 13.3 emphasized on education, awareness and institutional and human capacity building. It is highly required in the third world countries.



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Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact, the target is highly important to all people and educational institutes as well The developing countries are not self-capable for implementing these targets and

the developed countries are not willing to pay the price what they have done in the price of the planet and its habitats. The world temperature beyond 2.0 "It's time to stop the looting and generating climate change because we must preserve these wonderful mountains and these wonderful glaciers (Poudel, 2023).

According to the world bank, 'the status of

since 1901

temperature increase Figure 3 Climateknowledgeportal.worldbank.org/country/Nepal

2022

24 °C

18 °C

12 °C

180 mm

120 mm

120 mm

60 mm

Average Minimum Surface Air Temperature

Average Maximum Surface Air Temperature

Average Maximum Surface Air Temperature

Precipitation

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(WB, 2023)'. The following figure will give more view with the color code of the temperature and its precipitation. Higher the temperature higher the precipitation, it will have floods land slides, flash floods, bursting of Himalayas since the snow will melt in the snow lakes quickly. 'The average temperature of Nepal reaches 24.30° cls. which is average surface air temperature in July months and reaches -6 in the month of January. During July there is highest precipitation and lowest in November' (WB, 2023). There are some months like July and August risk of heat to the people. Especially children and elderly people are with heat risks, likewise the birds and other animals are also in risks of heat.

Forest fires in Nepal: The forest fire has been increasing year after year in Nepal. A report published in Nepal Times on (2023) "wildfires in Nepal will increase by 12% by 2030, 30% by 2050, and 50% by the end of this century as the climate crisis intensifies along the Himalaya (Raju J. Prasad and Sujan Khanal, 2023)". According to NDRRM bulletin April 2023, There were 18791 lost the life due to incidents of forest fire and 2 568 being injured and the loss of property 22 billion and 23 karod and the report also highlighted the loss of wild life, forest products such as wood, herbs and it was recorded since past 10 years.' (NDRRM, दस वर्षमा

आगलागीका घटना तेब्बर ( Three fold of forest fire in ten years), 2023).



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Climate change and Impact on biodiversity: There are different studies on it; according to UN Climate action "globally, freshwater, terrestrial, and marine ecosystems have all seen changes due to climate change. It has led to the extinction of native species, a rise in illnesses, and widespread plant and animal mortality, marking the first instances of extinction brought on by climate change. A mammal's habitat is lost in three different ways: +1.5° C +4%, +2.0°C +8%, and +3.0° C + 41% of animals lose half of their habitat. (United Nations - Climate Action, 2023-Retri.). "This rich and unique biodiversity is threatened by multiple anthropogenic and natural factors operating at different spatial scales. Deforestation, biological invasion, pollution, overexploitation, fire, and mining in fragile regions degrade natural ecosystems; while poaching is responsible for the decline of some keystone species" (Aishwarya Bhattacharjee, José D. Anadón, David J. Lohman, & et.al., 2017). A study was carried in Dhadhing district of Nepal and the study found out as 'Although there hasn't been a noticeable shift in the availability of non-timber forest products (NTFPs) or grass fodder in the region, observations indicate that several fruits, such papaya and guava, which were once widely accessible, are now less common. In a same vein, other plant species, such Nundhike, Chutro, Aank, and Tuni, appear to be declining in quantity. In addition, there are now more Utis, Gandhe Jhar, and Banmara than there were in the past' (Dhakal Kabindra; Sabina Silwal; and Govinda Khanal, 2010).

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Climate change and landslides in Nepal: Landslides normally occurs in Monsoon season of Nepal, but the trend of rainfall during the season mainly causes heavier landslides, when the climate has been changing the frequency and deadly landslides occurred accordingly. "According to National Disaster Risk Reduction and Management Authority (NDRRMA) reports as of 31 July, 164 people have lost their lives due to landslides and floods, and many more are missing" (UNDRR, 2020). According to NDRRM (2023) Since On the day of Monsoon started 31st of Jestha (15th June 2023 to 21 June) 6th Asad up to afternoon 13 people died, 26 people have been missing 8 people are under treatment, 41 houses are completely destroyed and 7 houses are partially damaged in hilly three districts Bhojpur, Tanahu And Nuwakot.' (NDRRM, 2023).

**Drying up water resources:** Due to rise in temperature drying up fresh water resources has been occurring in Nepal. A study was carried out in Nauli village which is in Dadeldhura district, it has found out that 'the water source the village has been using for drinking experienced drying up slowly' (RVWRMP, 2021) According to World Metrological organization (2023) reported that 'this year is the warmest year, the data up to the end of October showed  $1.40^{\circ}$  Celsius with the margin of  $\pm 0.12^{\circ}$  above the pre- industrial base line 1850-1900 base line' (WMO, 2023)\*\*. UN water report as a part of SDG 6 explained as 'Seasonal water shortage will worsen in areas where water is already scarce, like the Middle East and the Sahel in Africa, and rise in areas where it is now copious, including Central Africa, East Asia, and portions of South America. These effects are due to climate change. 10% of people on Earth, on average,



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Impacts on Mental health and climate change: A study was carried out in 2015 according to the study found out when the temperature increase it triggers to 'boost levels of violence and aggressiveness, and longer droughts brought on by global warming may result in a rise in farmer suicides. On the other hand, worry and poor mental health can result from droughts. Depression, adjustment disorder, and posttraumatic stress disorder can result from an increase in the frequency of disasters brought on by climate change. The need to relocate due to climate change and global warming may result in acculturation stresses' (Susanta Kumar Padhy, Sidharth Sarkar, Mahima Panigrahi, and Surender Paul., 2015).

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'Climate change has significant mental health consequences, including stress, insomnia, highrisk coping behaviors, and mental disorders like depression, anxiety, and post-traumatic stress. Disasters can also lead to long-term effects on well-being, economic stability, and infrastructure, including increased poverty, domestic violence, substance abuse, and forced migration. Children are more affected by disasters than adults and are more likely to have continued trauma-related symptoms after a disaster. First responders and emergency workers are at increased risk for mental health consequences in the short and long term (Haase, 2023)'.

### Data Analysis, findings and discussion.

### a). Quantitative analysis

There were 15 variables to identify their views in given statement on the issue climate change and its' impact on different sphere of life and nature. Variable No16 was given to choose on alternative from the given answers known as multiple choice. The last one was for qualitative analyzed, analyzed separately.

The Google form was sent separately by the use of messenger who missed it from the mail and public domain. From the public and mail domain 27 Reponses received and from the messenger two (2) answer, combined it made 27+2=29 altogether to analyze.

Instruction was given to answer the questions clearly as what you feel rate it according to your understanding on the impact of climate change; if you marked 1 would be very high and when the number increase the impact would be lower and when it reaches to 5, there will not be impact.

Perception analysis of the respondents.



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### Perception analysis of the respondents

*Table 1: Perception analysis on impact of climate change (N=29)* 

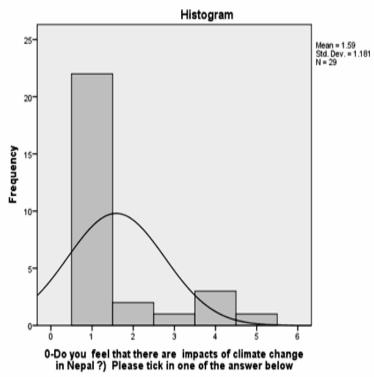
		Frequency	Percent	Valid Percent
	very high	22	75.9	75.9
	high	2	6.9	6.9
	A little bit	1	3.4	3.4
	Negligible	3	10.3	10.3
	Not felt	1	3.4	3.4
	Total	29	100.0	100.0

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Source: Primary data

The respondents have given their perception on climate change and its impact as Very high 75.9

percent, high 6.9 percent and A little bit 3.4 negligible percent, 10.3 percent and 3.4 percent not felt. The mean value of the 1.59, analysis of which represent 96.6 percent population felt the impact of the climate change. Perception of the people on climate change and its impact being increasing rapidly.





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## Impact analysis of 1-5 variables, findings and discussion.

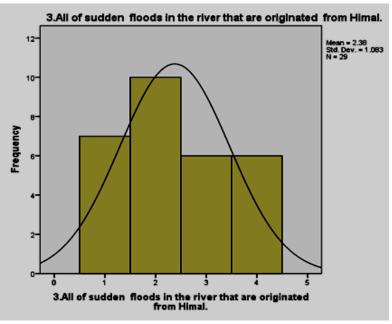
Table 2 : Statistical analysis from Q 1 to 5 on impact of climate change (N=29)

	1-Melting	2.Burst	3. All of	4 Irregular-	5-High lev-
	snow in the	of snow	sudden	ity in rain-	el of rain-
	Himalaya)	lakes	floods in the	fall	fall
			river that		
			are originat-		
			ed from		
			Himalayas.		
Mean	2.07	1.86	2.38	2.17	1.90
Median	2.00	1.00	2.00	2.00	2.00
Std. Deviation	1.193	1.274	1.083	1.037	1.145
Variance	1.424	1.623	1.172	1.076	1.310

Source: Primary Data Average Mean value; (2.07+1.86+2.38+2.17+1.90) = 2.0

The mean value of the impact in different areas found respectively as melting snow in the Himalaya 2.07, Burst of snow lakes 1.86, all of sudden floods in the river that are originated from Himalaya 2.38, irregularity in in rainfall 2.17 and high level of rainfall 1.90 and the average

mean value found 2.07 of these 5 variables. The histogram inclined towards. An article published in Wall street Journal also indicated the 'snow getting thin in Everest' (Stacy Meichtry, Krishna Pokhrel, Carl Chur Chill and Paolo Bosonin, 2023), the same issue was also in listening materials, it also highlighted the glaciers became the lake.





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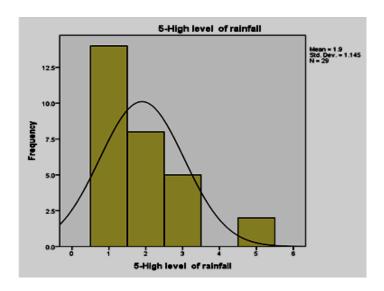
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Now the glaciers are in trouble. If the snow is melting as indicated, the snow lakes would be burst, it causes the all of sudden floods in the down streams, the mean value of the stamen found 2.38, this was rated by the respondent's higher level.

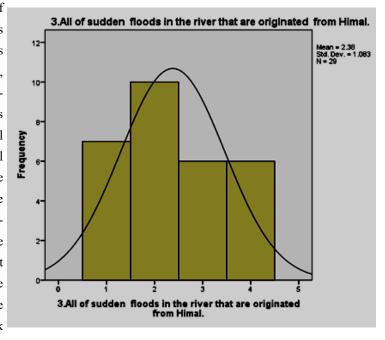
'The mean calculates the central tendency of the data set (Frost,

start melting rapidly of Himalaya, their impacts would be in different areas such as burst of snow lakes, all of sudden floods, difficult to climb the mountains etc. The irregularity rainfall and high level of rainfall also another areas of the impacts, the mean of these two variables found respectively as 2.17 and 1.90. The respondents felt the impact on rain fall due to climate change. It substantiate the view of World Bank



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2023 ). Mean value indicates where the value concentrated the most. In the figure. If the ice of



'higher the temperature higher the rainfall' (WB, 2023).

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years), 2023).

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### Impact analysis of 6-10 variables, findings and discussion.

Table 3 Statistical analysis of $Q$ 6 to 10 on impact of climate change ( $N=29$ )					
	6. Increased	7. Impact	8. Impact	9- Land	10.Impact
	forest fire	on wild life	in biodiver-	slides	in agricul-
			sity		ture
Mean	2.24	2.03	2.21	2.10	1.97
Std. Deviation	1.057	1.117	1.236	1.175	1.052
Variance	1.118	1.249	1.527	1.382	1.106
Kurtosis	.144	.547	018	-1.094	.964
Std. Error of Kurtosis	.845	.845	.845	.845	.845

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Source: Primary data. Average Mean of Q 6-10 (2.24+2.03+2.21+2.10+1.97) =2.11

The excessive GHG emission increased the temperature of the earth, it increased the heat, that triggers the forest fires, the respondents also experience the increase in the forest fire with the mean value of 2.24, which inclines the towards the higher side of distribution of the respondents. The respondents also found the loss of wild life, the variable has 2.03 mean value which is higher side of the distribution of the rating, it was the impact of the wild life but NDRRM indicated in forest products such as herbs and wood and these responses corroborate the view of NDRRM (NDRRM, दस वर्षमा आगलागीका घटना तेब्बर (Three fold of forest fire in ten

Rise in temperature and impact in biodiversity also recognized well by the respondents, the mean value on the issue found 2.0, it is the indication that there is an impact in biodiversity, it validated the view on climate change and its biodiversity of UN (2023) and Bhattacharjee et.al. (2017)

Heavy rainfall, sometime earthquake also triggers the land slides, mostly the land slide occurred in Nepal during rainy seasons. It is the result of unexpected rainfall during the rainy season.



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Table 4 Statistical analysis of Q 11 to 16 on impact of climate change

	11. Drying of water sources	12. Climate change has added difficulties to livelihood of the people.	13. Climate has effect on mental health of the people	for the im-	15 How to Improve the climate change
Mean	2.07	1.79	2.03	2.38	1,72
Std. Deviation	1.132	1.146	.981	1.293	1.125
Variance	1.281	1.313	.963	1.672	1.266

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Source: Primary Data, Average Mean (2.07+1.79+2.03+2.38+1.72) = 2.026

The respondents on the impact with drying water source sue to climate change (increased heat) responded as high impacts, the mode also 1 even there are multiple modes, vale 1 is the very high in impact. Likewise, the climate change added difficulties in livelihood drawn mean value 1.79, this also high side of impact, mean added difficulties in living, mental health issue also important which was recognized by the respondent with the average mean 2.03, the responsible part—also mean found 2.38, how to improve the climate change—has mean 1.86. With all these average mean found 2.026, with comparing to given value 1—for very high, 2 high and 3 a little bit impact. 2.026 is in the line of high impacted in these five variables. Drying up water resource resembles with study carried out by Dhaka & et.al 2010 and (RVWRMP, 2021). The respondents also recognized the effect on mental health also, it also supported by the study carried out of (Haase, 2023) likewise the study carried out by (Susanta Kumar Padhy, Sidharth Sarkar, Mahima Panigrahi, and Surender Paul., 2015). Who is responsible question was asked on it was clear that the higher CGH producing countries, the responses analyzed presented in table No 5

Table 5: Carbon Emission countries andtheir carbon emission share in the global analysis

		Frequency	Percent
Valid	Very Highly developed countries	9	31.0
	Developed countries	9	31.0
	Industrializing countries ( Developing)	4	13.8
	Least developed countries	5	17.2
	Nepal is not at all contributing in Cli-	2	6.9
	mate change)		
	Total	29	100.0

.Source: Primary data.



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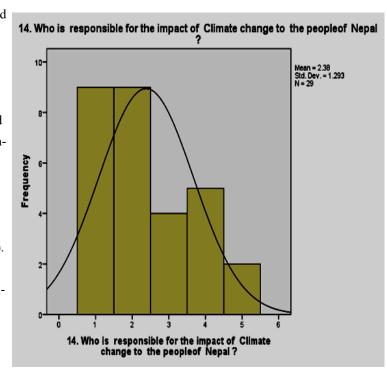
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Very highly developed countries and developed countries bear the 62.1 percent and industrializing countries 13.8 percent and under developed countries 17.2 % 'these countries are 45 (Africa 33, Asia 8, Caribbean 1, Pacific 3)' (UNCTAD, 2023). The data highlighted that the most responsible in climate change found the industrialized countries since these countries are the



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most GHG producing countries. Perception of Nepalese respondents, historically Nepal was not having any industries to emission CO2 that can influence the climate change, but Nepal also in the category of least developed countries in the ranked of 114 with carbon emission 0.02 % (ref fig No:1), It substantiate the view of the respondents.

**Question 15 was** seeking mitigating measures of impacts from the respondents they have categorically answered as

#### Participants perception on how to improve the climate change (N=29)

	Frequency	Percent
All of the above	18	62.1
Reduce and maintain to 1.5 C	5	17.2
Stop Carbon emission with immediate effect by the Developed countries	3	10.3
Pay the damage to developing countries	2	6.9
Encourage developing counties also to establish carbonless industries	1	3.4
Total	29	100.0

Source: Primary data.



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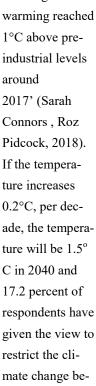
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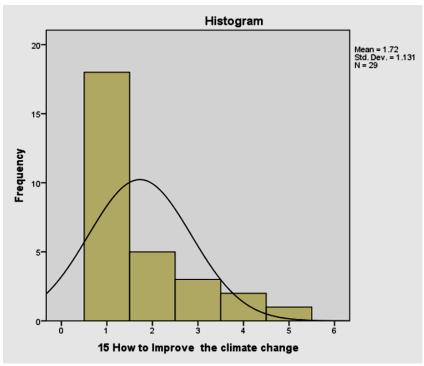
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'In the decade 2006–2015, warming reached 0.87°C (±0.12°C) relative to 1850–1900, predominantly due to human activity increasing the amount of greenhouse gases in the atmosphere. Given that global temperature is currently rising by 0.2°C (±0.1°C) per decade, human-induced





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low 1.5 C and 10.3 percent given view to stop CO2 emission from immediate effect, 3.4 percent given view to be aware of carbon emission industries and encourage to establish carbon less industries. 6.9 percent said 'pay the damage inflicted to the innocent people of developing countries given view by 6.9 percent respondents and 62.1 percent responded all of the above, This was a strong message given by the respondents on the issue of climate change.

### Qualitative analysis

There were 10 respondents responded to the open-ended question. The question was given to share their views on climate change. They have given their views and the main them of the views grouped as responsible for climate change, impact of the climate change, and mitigating measures. The same answers have different areas. These are categorically with thematic analysis presented below



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Responsible	Impact	Measures of Mitigations.
Industrialized, developed	Melting snow from Hima-	Planned development effort
countries the most - 3	layas- 3	- 3
Industrializing countries3	Severely affected downhill	Use of renewable energy-
	with floods3	Hydropower-4
	Biodiversity severely af-	Coordination with all sec-
	fected 4	tors-2
		Education: Awareness rais-
		ing -2
		Eco friendly initiative -2
		Climate smart infrastruc-
		tures-2
		Climate friendly agriculture

Source: Primary data

The analysis identified the responsible areas as Industrialized, developed countries and industrializing countries which was coded to 6 from the responses, mainly three areas of impact of climate change highlighted by thee respondents such as melting snow, floods and biodiversity and 16 wording identified and coded to the mitigating measures of the climate change.

### Summary of the Results and the discussion:

Both the analysis has identify the areas of impact and responsible of climate change due to increase of heat in the in the earth surface. There were 16 variable were given to the quantitate analysis, these variables average mean value 1.9025, it indicates putting to the load value of the likert scale given 1 as highest scale and lowest 5, which indicates, the 2>1.9025, the result found even higher than 2, It means climate change has heavily impacted to the people of Nepal, These variables where: Do you feel that there are impacts of climate change in Nepal, such as melting snow in the Himalaya, burst of snow lakes, all of sudden floods in the river that are originated from Himalaya, Irregular rainfalls, high level (quantity) of rainfall, Increased forest fire, impact in biodiversity, impact in agriculture, landslides, drying off water sources, difficulties in livelihood, of the people, identification of responsible in climate change and how to improve it.



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In qualitative analysis, they have identified the responsible to increase the surface heat that has triggered the climate change- the developed and industrialized and industrializing countries, impact also indented as in biodiversity, snow melting in the Himalaya and floods. These identification substantiate that were also identified by the different researchers (Aishwarya Bhattacharjee, José D. Anadón, David J. Lohman, & et.al., 2017), (A.Nepal, 2023), (Jyoti Koirala & Nimanada Rijal, 2021), (Kumar, 2012), (J.F.B. Mitchell; S.Manabe, V.; & T. Toioka J.F.B., 2023 Retri.)

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Conclusion: Climate change has been affecting to Nepal in different areas even though it has very negligible contribution of 0.02% carbon emission as compared to other countries and ranked 114 (WMO, 2023). The country has heavy losses in infrastructures, agriculture damages from floods, mental health also started to come up in the surface, anxiety, distress has been increasing. The climate change has impact on, physical, economic, health and mental health to the people of Nepal. The mitigating measures are also given properly by the respondents of quantitative and qualitative analysis. On the basis of these findings the recommendations are drawn.

**Recommendations:** The recommendation drawn on the basis of findings.

- The Climate influencing GHG should be stopped to release as soon as possible, it should be carried out from the industrialized countries, industrializing countries with urgency, within time frame developing and underdeveloped country should also be ready to shift their carbon producing activities in greener industries and activities.
- Developing countries do not have financial, technical and human resource to be resilient of climate change, therefore the developed countries should come forward to help them as promised in the international forums such as COP-28.
- School curricula climate change and mitigating measures should be included and the mass, especially to the developing and under developed countries should be trained to be resilient of climate change, sine they're also dying/ heavily impacted from heat waves and cold.
- Localized longitudinal research on climate change and its impact should be started in Nepal with varying its topography.



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# References

J.F.B. Mitchell; S.Manabe, V.; & T. Toioka J.F.B. . (2023 Retri., 12 14). Equilibrium Climate

Change - and its Implications for the Future. Retrieved from https://

citeseerx.ist.psu.edu/document?

repid=rep1&type=pdf&doi=ac4f8158ad958f9bf5a8f3394469b77d734a1f31:

- A.Nepal. (2023, 12 12). *Nepal Jungle Safari*. Retrieved from https://www.adventuresnepal.com/nepal/jungle-safari.htm#:
- Acharya, B. R. (2008). Government and Public Land Management in Nepal. *FIG/FAO/CNG International Seminar on State and Public Sector Land Management* (pp. 1-7). Verona, Italy: https://www.fig.net/resources/proceedings/2008/verona\_fao\_2008\_comm7/papers/10\_sept/5\_4\_acharya.pdf.
- Aishwarya Bhattacharjee, José D. Anadón, David J. Lohman, & et.al. (2017). The Impact of Climate Change on Biodiversity in Nepal: Current Knowledge, Lacunae, and Opportunities. *Climate*. doi: https://doi.org/10.3390/cli5040080
- Caltech. (2023, 12 12). https://web.gps.caltech.edu/~avouac/nepal\_trip/geography.htm. Retrieved from https://web.gps.caltech.edu/~avouac/nepal\_trip/geography.htm:
- CBS. (2021). *National Population Census of Nepal.* Kathmandu: Government of Nepal, Office of Prime Minister and Council of Ministers, National Census office, Thapathali. Retrieved from www. censusnepal.cbs.gov.np
- Dhakal Kabindra; Sabina Silwal; and Govinda Khanal. (2010). Assessment of Climate Change Impacts on Water Resources and Vulnerability in Hills of Nepal. Kathmandu: NAPA.

  Retrieved 12 21, 2023, from https://www.climatenepal.org.np/sites/default/files/doc\_resources/bshooe6hnfs\_3.pdf
- Frost, J. (2023, 12 19). Statistics By Jim. Retrieved from https://statisticsbyjim.com/basics/ measures-central-tendency-mean-median-mode/: https://statisticsbyjim.com/basics/ measures-central-tendency-mean-median-mode/
- Haase, E. (2023, May). *American Psychatric Association*. Retrieved from https://www.psychiatry.org/patients-families/climate-change-and-mental-health-connections/affects-on-mental-health.



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Website.
www.jhswn.con

Jyoti Koirala & Nimanada Rijal. (2021). Understanding the Low Carbon Consumption Habits of Nepalese Population for Tackling Climate Change at Community Level. *SSRN*, 7. doi: https://dx.doi.org/10.2139/ssrn.3922594

- Jyoti Koirala and Nimananda Rijal. (2021, September 13). Understanding the Low Carbon Consumption Habits of Nepalese Population for Tackling. *Social Science Research Network*, 7. doi: http://dx.doi.org/10.2139/ssrn.3922594.
- Keith Wade, and Marcus Jennings. (2016). The impact of climate change on the The impact of climate change on the global economy. Schroders- Talking Point Google Scholar, 12.
  Retrieved 12 14, 2023, from https://mybrand.schroders.com/m/01053abe732aa4a1/original/The-impact-of-climate-change.pdf
- Kumar, C. P. (2012). Climate Change and Its Impact on Groundwater Resources. *RESEARCH INVENTY: International Journal of Engineering and Science*, *1*(5), 43-60. doi:ISSN: 2278 -4721, Vol. 1, Issue 5 (October 2012), PP 43-60
- Malla, G. (2008). CLIMATE CHANGE AND ITS IMPACT ON NEPALESE AGRICULTURE. *The Journal of Agriculture and Environment Vol.:9, Jun.2008*, 62-71.
- NDRRM. (2023, July). Work Being started based on priority in Floods and land slide affected areas . *National Bipad Bulletin. monthly Issue 15*. Nepal: NDRRM. Retrieved from Website: www.bipad.gov.np/np/
- NDRRM. (2023, April 30). दस वर्षमा आगलागीका घटना तेब्बर ( Three fold of forest fire in ten years). *Rastriya Bipad Bulletin Monthly*. Kathmandu, Nepal: NDRRM. doi: Issue 13
- News, U. (2023). Climate and Environment: Stop the madness' of climate change, UN chief declares ( Audio HUB). UN News. Newyork: https://news.un.org/en/story/2023/10/1142987. Retrieved from https://news.un.org/en/story/2023/10/1142987
- NTB. (2023, 12 12). *Geography of Nepal*. Retrieved from https://ntb.gov.np/plan-your-trip/about-nepal/geography: https://ntb.gov.np/plan-your-trip/about-nepal/geography
- Poudel, A. (2023, 11 05). https://kathmandupost.com. Retrieved from https://
  kathmandupost.com/climate-environment/2023/11/05/un-chief-puts-a-spotlight-onnepal-s-climate-crisiscretary general visited Nepal on October: https://
  kathmandupost.com/climate-environment/2023/11/05/



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Website.

www.jhswn.con

Raju J. Prasad and Sujan Khanal. (2023, May 13). More pre-monsoon forest fires in Nepal. *Ne-* pali Times.

- Raquel A. Garcia, & et.al. (2014). Multiple Dimensions of Climate Change and Their Implications for Biodiversity. *Science*, 12. doi: DOI: 10.1126/science.1247579
- RVWRMP. (2021). *Climate Change Drying up the Water Sources in Nauli Village*. Kathmandu: https://www.rvwrmp.org.np. Retrieved from https://www.rvwrmp.org.np/single-post/climate-change-drying-up-the-water-sources-in-nauli-village
- Sarah Connors , Roz Pidcock. (2018). *Frequently Asked Questions*. IPPC. Retrieved 12- 21, 2023, from https://www.ipcc.ch/site/assets/uploads/sites/2/2018/12/
  SR15 FAQ Low Res.pdf
- Stacy Meichtry, Krishna Pokhrel, Carl Chur Chill and Paolo Bosonin. (2023, Dec. 14). Mount Everest On Thin Ice. *Wall Street Journal*, p. 2 mins read.
- Susanta Kumar Padhy, Sidharth Sarkar, Mahima Panigrahi, and Surender Paul. (2015). Mental health effects of climate change. *Indian Journal of Occupational and Environmental Medicine ( IJOEM)*, 19(1), 3-7. doi:doi:10.4103/0019-5278.156997
- UN. (2023). Partnerships and cooperation for water. Paris: UNESCO. doi:ISBN 978-92-3-100576
- UN. (2023-Retri., 12 20). *UNited Nations Climate Action*. Retrieved from https://www.un.org/en/climatechange/science/climate-issues/biodiversity: https://www.un.org/en/climatechange/science/climate-issues/biodiversity
- UNCTAD. (2023, December 10). *UN list of least developed countries*. Retrieved from https://unctad.org/topic/least-developed-countries/list#:
- UNDRR. (2020, August 5). *Prevention Web*. Retrieved from Nepal's deadly landslides explained: https://www.preventionweb.net/news/nepals-deadly-landslides-explained
- UN-SDGS. (2023 Retri., 12 15). *Global goals of climate action*. Retrieved from https://www.globalgoals.org/goals/13-climate-action/: https://www.globalgoals.org/goals/13-climate-action/
- WB. (2023, 12 14). Nepal -Summary | Climate change . Retrieved from https://climateknowledgeportal.worldbank.org/country/nepal: https://climateknowledgeportal.worldbank.org/country/nepa
- WMO. (2023). *Provisional State of the Global Climate in 2023*. WMO. Retrieved 12 21, 2023, from https://wmo.int/publication-series/provisional-state-of-global-climate-2023



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WB. (2023, 12 14). Nepal -Summary | Climate change . Retrieved from https://
climateknowledgeportal.worldbank.org/country/nepal: https://
climateknowledgeportal.worldbank.org/country/nepa

WMO. (2023). *Provisional State of the Global Climate in 2023*. WMO. Retrieved 12 21, 2023, from https://wmo.int/publication-series/provisional-state-of-global-climate-2023

ISSN: 2976-1077

World101. (2023, Julu 25). https://world101.cfr.org/global-era-issues/climate-change/who-releases-most-greenhouse-gases. Retrieved from Cumulatively: Which countries have historically emitted the most greenhouse gases?: Cumulatively: Which countries have historically emitted the most greenhouse gases?