

## EXPLORING THE CLIMATE CHANGE REPORTING IN PAKISTANI NEWSPAPERS

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### Abstract

This study explores and analyses the predominant themes in climate change reporting within selected Pakistani newspapers; Pakistan Today, The Express Tribune, and The Nation, during the period from April 14 to May 14, 2025. Using deductive thematic analysis, the research examines which themes received greater prominence in the news coverage of climate change in Pakistan, specifically: Environmental Disasters and Crisis Events, Impacts on Agriculture, Economic Implications, Climate Justice and Social Inequality, Policy and Governance, Public Awareness and Education, International Climate Discourse and Pakistan, and Media Framing and Representation. The findings reveal that “Environmental Disasters and Crisis Events” emerged as the dominant theme across all sampled news stories. This suggests that reporting largely focused on narratives surrounding environmental hazards, disasters, human losses, and the role of NGOs and civil society

### INTRODUCTION

Climate change is a global challenge, and while the Government of Pakistan has introduced strategies and regulations to address it, the real difficulty lies in their implementation and in fostering public awareness. Azam Jan (2020) offered a microscopic analysis of the public understanding of climate change and the role of media and other social actors in shaping that understanding. The study emphasized that illiteracy and poor comprehension among the public are major barriers to effective implementation of climate policies in Pakistan. According to the author, successful policy execution depends not only on the

ruling elites who legislate but, on the awareness, and cooperation of the masses. Thus, climate literacy is considered essential to achieving meaningful responses to this pressing issue.

Seacrest et al. (2000) noted that climate change only began attracting significant public attention in the 1980s, despite its existence for centuries. The concept generally refers to adverse weather shifts and their effects on human life and is now one of the most widely debated global issues. Developing countries like Pakistan contribute minimally to greenhouse gas (GHG) emissions compared to industrialized nations;

however, their dependence on climate-sensitive sectors such as agriculture renders them disproportionately vulnerable. Pakistan, ranked as the sixth most climate-vulnerable country (Javed, 2016), validated its climate policy in 2012 and established a dedicated ministry. Yet, awareness and implementation of these laws remain weak. Globally, two strategies are commonly employed to address climate change: mitigation—reducing GHG emissions to prevent harmful effects and adaptation, modifying lifestyles and systems to reduce exposure to climatic risks (Anderson, 2010). Both, however, require substantial public awareness, which is currently lacking in Pakistan, resulting in weak responses. Climate change adversely affects food and water resources, alters rainfall patterns, accelerates sea-level rise and glacier melt, and triggers disasters that severely impact communities (Scheffran, 2011).

Kiran and Qurat-ul-Ain (2017) further observed that vulnerability across Afro-Asian regions is particularly acute. For Pakistan, where agriculture contributes 21 percent of GDP and employs nearly half of the labor force (Javed, 2016), changing monsoon patterns threaten food and water security, increasing risks of displacement. Although Pakistan contributes just one percent of global GHG emissions, the *Global Climate Risk Index* (as cited in *The Express Tribune*, 2020) places it among the top ten countries most affected by climate change. Beyond floods and droughts, regions like Tharparkar face prolonged food insecurity, drought, and fatal heatwaves. These realities underscore the importance of climate literacy, defined as “an understanding of the climate's influence on you and society and your influence on climate” (NOAA, 2008). In Pakistan, however, climate literacy is low—even among educated segments and policymakers—hindering awareness campaigns and the effective implementation of climate policies. This calls for reforms in curricula, training programs, and awareness campaigns.

Pakistan's limited climate literacy can also be attributed to political neglect and an education system focused primarily on employability rather than community building. Civil society and NGOs that attempt to promote awareness are often dismissed as proponents of “Western culture,” reducing their credibility in more conservative circles. Meanwhile, global media extensively highlight climate change, but

Pakistani media tend to prioritize political sensationalism and profit, sidelining serious issues such as climate risks. Scholars suggest leveraging existing institutions to promote awareness, especially educational institutions, which fall under provincial authority. Introducing climate-related educational activities at all levels—from pre-primary to doctoral—could gradually embed awareness. Similarly, mainstream and social media can play a key role by spotlighting scientific perspectives, daily climate events, and policy accountability. With over 2,000 newspapers and 100 television channels, Pakistan's media could be directed by law to allocate space and airtime to climate change coverage, particularly during prime time.

Civil society also holds potential to bridge gaps left by government institutions. NGOs, research institutes, trade unions, and professional associations have traditionally mobilized around human rights, gender equality, and minority rights, but in recent years have also engaged with environmental issues. Partnerships between organizations such as the World Bank, UNDP, and local civil society groups offer platforms for collaboration (Shahid & Piracha, 2016; Shahid, 2017). However, these initiatives often target elites, policymakers, and media rather than the general public, limiting their broader impact. Scholars argue that civil society should redirect its focus toward grassroots communities, designing awareness programs, supporting local NGOs, and collaborating with educational institutions and media.

Local governance also offers opportunities for climate literacy. While historically linked to military regimes, the most sustained system was established under General Pervez Musharraf in 2001. Local governments allow elected representatives to engage directly with grassroots communities and could be instrumental in initiating awareness programs. As Bulkeley and Kern (2006) noted in the UK context, local governments play a significant role in promoting climate awareness, particularly regarding energy use. In Pakistan, however, local bodies have yet to engage meaningfully with climate literacy. Similarly, the Lady Health Workers (LHW) program, which reaches nearly 200 families per worker across the country (Jalal, 2011), could serve as a vehicle for climate-related awareness given its direct engagement with communities and its relevance to public health.

Overall, Pakistan remains highly vulnerable to climate change due to a lack of political will, weak curriculum design, government inattention, and insufficient media coverage. Given its limited economic resources, Pakistan cannot afford large-scale new initiatives and must instead rely on existing institutions to build awareness. Addressing climate change requires the collective efforts of individuals, civil society, educational institutions, media, and state organizations working with commitment toward climate literacy.

Keeping in view the urgency of the issue and the significance of media's role, this study addresses the following research question:

What major themes are evident in the climate change reporting of selected Pakistani newspapers (*Pakistan Today*, *The Express Tribune*, and *The Nation*) during April 14 to May 14, 2025?

Having established the broader context of Pakistan's vulnerability and the critical role of awareness and media, the next section reviews existing literature to understand how climate change reporting has been studied in different contexts and how these insights inform the present research

## LITERATURE REVIEW

In this review article the researcher Yanagi (2024), aimed at exploring the challenges in wheat production caused by climate change and finding out the strategies to combat climate effects. The researcher intended not only to investigate the impacts of climate on wheat quality, but also to assess the role of drought and floods in wheat production. Similarly, the impacts of Carbon Dioxide (CO<sub>2</sub>) concentration on wheat quality and nutrients in wheat is also discussed by researchers. Furthermore, the article focused on the effects of sea level rise on the coastal production areas. However, the researcher highlighted and discussed the advanced strategies to mitigate the effects of climate change in wheat production such as adaptation and selection of new varieties of wheat for sustainable agricultural development.

According to Yanagi (2024), wheat is considered as the most valuable crop among other crops globally. Due to the importance, the production and quality of wheat has remained the point of interest in the agricultural sector. However, the global climate change and rising temperatures that resulted in the

changing weather patterns and other numerous alarming effects such as drought, floods, high Carbon concentrations, change in precipitation and sea level rise have highly impacted the overall agricultural sector including wheat production and quality and disturbing the food supply. Owing to the need and status of wheat crop scientists are working on different strategies including genetic variation in wheat to make it more weather resistant and devising new adaptation techniques to ensure the good quality and high productivity of wheat.

The global rise in temperature due to climate change has drastically affected not only the wheat quality but also the production of wheat (Yanagi, 2024). The researcher claims that due to warm or extreme weather conditions have multifaceted effects ranging from soil dryness and drought caused by heavy evaporation to halting the process of photosynthesis in wheat highly necessary for its growth and nutrient absorption. In consequence of drought and water scarcity, the wheat become victim of "water stress" affecting the wheat. Similarly, the warm and extreme weather conditions are the most favorable climate conditions for pests and diseases in wheat. However, the wheat production process required low temperatures that help in slowing the growth of wheat for better formation, absorption of proteins and adjusting it with climate conditions. On the flip side, the high temperature causes "heat damage" in wheat. According to Yanagi (2024), just like drought and water scarcity affects the quality and production of wheat, in the same manner, more water in shape of floods and continuous rainfall also have drastic effects as the flood wash away minerals and nutrients from soil and damaging roots of wheat. It causes different diseases such as hypoxia in wheat. Similarly, another climate change effect on wheat production is higher CO<sub>2</sub> concentrations in the environment caused by burning energy sources and deforestation. Higher CO<sub>2</sub> concentrations increase the process of photosynthesis that affects the nutrients balance such as starch and protein and quality of wheat. With the advancement in science and research, scientists have developed various models such as greenhouse gas experiments and climate model for detecting changes in wheat production in advance (Yanagi, 2024).

The researcher found that sea level rise caused by high temperatures and glacier melting, have different

negative effects on wheat production and agriculture sector in many ways such as coastal erosion, changes in ecosystem, heavy floods, saltwater intrusion and other economic impacts. Moreover, the study highlighted the challenges faced while cultivating wheat in humid environments that include humidity issues, pest and diseases issues, rising temperatures and soil quality. The researcher suggested the need for adapting the new technologies and strategies to mitigate the climate change effects on wheat. According to Yanagi (2024), the climate-adaptive wheat varieties are climate resistant as they have been genetically modified to adapt harsh climate conditions. Owing to their genetic diversity, these genetically modified varieties are best for high productivity and quality as these are water efficient, highly resistant towards various pest and infections and heat and water stress resistant.

The study by Barkemeyer et al. (2024) examines the media's role in shaping public perception and policy discourse on climate change across various countries. The researchers focus on how climate change is portrayed in the media, highlighting the differences in coverage based on political, economic, and cultural factors. The article emphasizes that media outlets in different regions show varying degrees of urgency and depth in their climate change reporting, which significantly influences public awareness and action.

One key aspect discussed by the authors is the discrepancy in media coverage between developed and developing countries. While media in industrialized nations often focus on the scientific aspects of climate change, such as data-driven evidence and the role of human activities in global warming, media in developing countries are more likely to highlight the immediate effects of climate change, such as natural disasters and economic impacts. This divide creates a contrasting narrative that shapes how audiences in different regions understand the severity of the issue and the need for immediate action.

Additionally, Barkemeyer et al. (2024) point out that media coverage is often influenced by political affiliations and the economic interests of powerful stakeholders. For instance, in countries where the economy heavily relies on fossil fuels, media outlets tend to downplay the urgency of climate change, focusing instead on economic growth and the potential negative impact of climate policies.

Conversely, in regions where environmental policies are more advanced, media coverage is more proactive and focused on potential solutions. The authors argue that this variation in media portrayal can lead to polarization in public opinion, with differing levels of support for climate change policies depending on the media's framing of the issue.

The article also explores the impact of media ownership on climate change reporting. It suggests that large media conglomerates with vested interests in industries contributing to climate change often present a skewed narrative, minimizing the role of human activity in global warming and promoting business-as-usual approaches. In contrast, independent or non-profit media outlets tend to present more balanced perspectives, incorporating scientific consensus and emphasizing the need for policy reforms to address climate change effectively.

In summary, Barkemeyer et al. (2024) argue that media coverage plays a crucial role in shaping public understanding of climate change. However, the variation in media portrayal across different regions and political landscapes presents challenges to creating a unified global response to the crisis. The researchers highlight the importance of critical media consumption and the need for more responsible, scientifically accurate reporting to foster global cooperation in tackling climate change.

Hussain et al. (2024) examine the role of the media in reporting on climate change in Pakistan, focusing on how the journalists perceive and cover the issue. The authors conducted interviews with the 26 journalists and found that the climate change news is often ignored due to lack of limited political relevance, sensitivity, and the insufficient resources. They tense the need for the media to play a more responsible role in bringing the climate issues into the political discussion and national dialogue.

The authors begin by pointing out that the Pakistan's vulnerability to climate change, despite its minimal contribution to the global emissions. Pakistan is among the top 10 countries most affected by climate change and facing a range of hazards such as heat waves, melting glaciers, droughts and severe floods. The study cites data from the Asian Development Bank and the World Bank, that show rising temperatures could seriously affect agricultural

production, food security and leading to increased socio-economic losses.

This research uses the lens of peace journalism to analyze that how media can shift from conflict based to solution-based coverage of the climate issues. Peace Journalism emphasizes positive storytelling and highlights how journalists can raise awareness even within institutional and political constraints. Researchers argue that the journalists in Pakistan are aware of climate threats but lack of institutional support and the editorial freedom to highlight such stories.

Researchers have also found that the professional constraints and the organizational pressures often stop journalists from consistently paying attention to the environmental issues. They recommend the targeted strategies to improve the coverage, including better institutional guidelines, increased training, and stronger administrative support. The study highlights that responsible reporting can influence political and public debate, encouraging meaningful climate action within Pakistan.

Overall, Hussain et al. (2024) conclude that while the journalists in Pakistan are aware of climate risks, systemic issues in the media industry prevent effective coverage. Research supports to the integration of the climate change into political debates and the use of peace journalism principles to promote more responsible and the solution-oriented media reporting.

Building on these insights, the present study adopts a deductive thematic analysis to examine how Pakistani newspapers report on climate change. The next two sections outline the theoretical framework and methodology employed for data collection and analysis.

### THEORETICAL FRAMEWORK (Framing Theory);

In academic studies, framing theory is often used to analyse how media constructs issues and shapes public opinions. Researchers focus on content and form, identifying frames in media and measuring their effect on audience beliefs and actions. In political research, for example, scholars may analyse how media frames influence voters' perceptions of candidates or policies. In studies of social issues such as climate change, they may look at how frames related to race, gender, or

social class impact public attitudes toward those issues (Scheufele, 1999).

According to framing theory, media actively create meaning by choosing what to highlight and what to leave out (Entman, 1993). This selective emphasis can either promote certain ideas or suppress others, influencing the larger social narrative.

Furthermore, framing theory suggests that media shapes audience attitudes. For example, by framing a particular social issue such as climate change issue in a particular way (e.g., highlighting various aspects of the climate change issue, its social, economic and human life impacts). Research findings have evidenced on how framing theory can help researchers explore the impacts of such media framing od issues such as climate change (Iyengar, 1991).

Keeping in view the suitability, we have employed the framing theory in this study deductively to explore and analyze how selected Pakistani newspapers gave coverage to the climate change issue in Pakistan?

### RESEARCH DESIGN AND METHOD

#### Data Collection

For this study the researchers found 51 news stories regarding climate change in the daily *Pakistan Today*, 43 news stories in daily *The Express Tribune* and 09 news stories in daily *The Nation* by applying the key words and search mechanism employed in this study the time period understudy i.e. April 14<sup>th</sup> to May 14<sup>th</sup>, 2025. After employing data cleansing, we found 06, 14, and 07 news stories in all the selected newspapers respectively. As a next step we employed lottery method and selected two news stories from each newspaper. This is how we selected a sample size of six news stories to conduct a deductive thematic analysis. As suggested in Ghauri et al. (2025), the data has been collected applying the keywords such as; "Climate Change" "Global Warming" "floods" "flash floods" "terrestrial rains" "torrential rains" "land sliding" "glacier melting" "Hail Storm", past one month, only in headline/title, news stories. We have collected data from the official websites of the selected newspapers through 'Advanced Google Search' using; (allintitle: "Climate Change" site:https://www.pakistantoday.com.pk allintitle: "Climate Change" site:https://tribune.com.pk/ and allintitle: "Climate Change" site:https://www.nation.com.pk/) respectively.

**Data Analysis**

To address the research objectives, deductive thematic analysis was employed, following Braun and Clarke (2006). The broader theme under investigation was climate change reporting in Pakistan, which was operationalized into measurable categories of themes and sub-themes. A coding sheet was developed to guide the analysis.

For this coding framework, key terms were initially extracted from six English-language newspapers (*Daily Times*, *Dawn*, *The Nation*, *The Express Tribune*, *The News International*, and *Pakistan Today*). Two stories from each newspaper and seven from *Dawn* were reviewed, leading to the identification of eight main themes and fifteen sub-themes. Each story in the final sample was then analyzed against these predefined categories, ensuring a systematic and comprehensive thematic assessment.

The following section presents the results of this analysis, highlighting the themes that emerged most prominently in the sampled news coverage of climate change in Pakistani newspapers.

We have employed a coding sheet developed by Ghauri et al. (2025) in their study "Climate Change Reporting in Pakistani Newspapers: Exploring the Predominant Themes" and we have developed some coding sheet-based questions;

1. **Environmental Disasters and Crisis Events;**
  - Coverage of climate-induced disasters such as floods and heatwaves.
  - How are these events framed in terms of climate change?
  - How news reports link climate change consequences with human losses?
  - How newspapers report on the involvement of NGOs in disaster response and climate adaptation projects?
2. **Impacts on Agriculture;**
  - How climate change affecting Pakistan's agricultural output?
  - Coverage of how climate change is exacerbating water scarcity issues in Pakistan, which is a crucial concern for both rural and urban populations.
3. **Economic Implications;**

- Coverage of how the changing climate affects Pakistan's economy, particularly in agriculture, tourism, and infrastructure.
  - How the media frames climate change as a challenge for achieving sustainable development goals in Pakistan.
4. **Climate Justice and Social Inequality;**
    - How climate change is disproportionately affecting marginalized communities?
  5. **Policy and Governance;**
    - How newspapers report on the government's climate change policies, programs, and their effectiveness?
    - Coverage of Pakistan's role in international agreements like the Paris Agreement or involvement in climate adaptation funds and how these are presented in the media.
    - Media coverage of how prepared Pakistan is for extreme weather events, such as floods and droughts, and government plans to mitigate these disasters.

**Public Awareness and Education;**

- How newspapers are educating the public about the consequences of climate change, such as heatwaves, floods, droughts, and environmental degradation.
  - Whether the media is relying on scientific reports or sensationalizing climate change in a way that might mislead or oversimplify the issue.
6. **International Climate Discourse and Pakistan;**
    - Coverage of Pakistan's position in global climate change discussions, including its responsibility as a developing country, and the pressure from developed nations to cut emissions.
  7. **Media Framing and Representation;**
    - Analyzing the language and metaphors used in media coverage (e.g., "climate crisis," "climate emergency," "global warming," etc.).

**FINDINGS & ANALYSIS**

The following pages contain a deductive thematic analysis of the news stories published in daily *Pakistan Today*;

“Hailstorms damage vehicles, trigger flash floods in Islamabad and KP”. (2025, April 16). *Pakistan Today*.

<https://www.pakistantoday.com.pk/2025/04/16/hailstorms-damage-vehicles-trigger-flash-floods-in-islamabad-and-kp/>

Theme	Sub-Theme	Question	Coding Units	Coding Units in News Report
1. Environmental Disasters and Crisis Events	1.1 Floods and Heatwaves	How are climate-induced disasters like floods framed in news reports?	Hailstorm, Flash Floods, Heavy Rain, Collapse of Glaciers	Hailstorm, Flash Floods, Torrential Rains
1. Environmental Disasters and Crisis Events	1.2 Human Losses	How is human impact portrayed in climate disaster stories?	Mortality, Hospitals Overwhelmed, Damage, Heatstroke Deaths	Vehicle Damage, Power Outage, Traffic Blocked
5. Policy and Governance	5.3 Disaster Preparedness and Response	How prepared is Pakistan to deal with climate-related extreme weather events?	Disaster Management Authorities, Power Supply Disrupted, Circuits Tripped, Preparedness	Disaster Management Authority alert, Rescue operations
3. Economic Implications	3.1 Economic Impact of Climate Change	How does climate affect economy, tourism, infrastructure?	Infrastructure Damage, Agricultural Productivity, Landslides	Infrastructure Damage (Vehicles, Roads), Commuter Disruption

**Interpretation:**

Using the deductive thematic approach guided by the shared codebook, this news report clearly addresses multiple dimensions of climate-induced crisis. The news story highlights severe hailstorms and flash floods, matching directly with Theme 1: Environmental Disasters and Crisis Events, particularly sub-theme 1.1 (Floods and Heatwaves). Coding units such as “hailstorm” and “flash floods” confirm this alignment.

The destruction of vehicles and blockage of roads due to sudden flooding indicates the human and infrastructural impact, linking to Sub-theme 1.2 (Human Losses), even though no deaths are reported. Phrases like "damaged dozens of vehicles", "power outages", and "traffic chaos" fall within the coding units for both human loss and infrastructure disruption. Mentions of rescue operations and alerts by the Disaster Management Authority strongly

connect to Theme 5: Policy and Governance, under Sub-theme 5.3 (Disaster Preparedness and Response). The news indicates reactive measures but also implicitly questions the level of preparedness.

Furthermore, the economic aspect is indirectly present: damage to private property and disruption in daily commuting reflect infrastructure costs, hence the inclusion of Theme 3: Economic Implications, Sub-theme 3.1.

“WMO forecasts above-normal rainfall and heat for South Asia’s monsoon season”. (2025, May 8). *Pakistan Today*.

<https://www.pakistantoday.com.pk/2025/05/08/wmo-forecasts-above-normal-rainfall-and-heat-for-south-asias-monsoon-season/>

Theme	Sub-Theme	Question	Coding Units	Coding Units in News Report
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1. Environmental Disasters and Crisis Events	1.1 Floods and Heatwaves	How are climate-induced disasters like floods framed in news reports?	Heavy Rain, Heatwaves, Weather Intervention, Monsoon	Above-normal rainfall, intense heat forecast, monsoon heat
5. Policy and Governance	5.2 International Cooperation	How are global institutions and agreements covered in media?	WMO, International Cooperation, Climate Risk Planning	WMO forecast, Global coordination, ENSO outlook
6. Public Awareness and Education	6.2 Focus on Scientific Findings vs. Popular Narratives	Is the reporting grounded in scientific explanation or sensationalism?	WMO Forecast, ENSO, Met Office Warnings	Scientific modeling, WMO assessment, ENSO trends

**Interpretation:**

This report quotes WMO warnings about above-normal rainfall and heat, making it highly relevant to the theme of Environmental Disasters and Crisis Events (1.1). The scientific basis provided through ENSO and regional forecast discussions aligns with Theme 6.2, emphasizing reliance on credible climate science. Moreover, references to WMO and cross-border climate monitoring represent international climate collaboration under Theme 5.2. This article portrays proactive engagement by global institutions in early warnings for Pakistan.

The following pages contain a deductive thematic analysis of the news stories published in daily *The Express Tribune*; “Lahore’s rapid urbanization worsens heat crisis”. (2025, April 27). *The Express Tribune*. <https://tribune.com.pk/story/2541567/lahores-rapid-urbanization-worsens-heat-crisis>

Themes	Sub themes	Question	Coding Units	Coding units in news report.
1. Environmental Disasters and Crisis Events	Floods and Heatwaves Climate Change and Rising Temperatures	Coverage of climate-induced disasters such as floods and heatwaves. How are these events framed in terms of climate change?	Malnutrition, Mortality, Hospitals Overwhelmed, Heatstroke Deaths,	Extreme heat waves and smog in Lahore
	Rapid Urbanization		Dust Storm, Heavy Rain, Wind Storm, Hot Weather, Heatwaves, 88% Humidity, Weather Intervention, Flash Floods.	

				Hailstorm, Collapse Of Giant Glaciers, Damage of green areas Rapid construction	
		Deforestation		Rescue Team, Dewatering Pumps, Public Concerns, Survey Flood- Affected Areas, IMF Condition, Urban Heat Island Effect	
Policy and Governance	Poor Urban Planning			thoughtful planning and long-lasting actions	More roads, housing schemes, industries and buildings, Replacement of green areas with concrete buildings, water shortages, dirty air and sever heat
	Need for Long- term Solutions				plant more tree and protect the green areas, awareness campaigns, strong laws and the education about environment
Public Awareness and Education	Health and Safety Concerns			global climate crisis	high temperatures can be dangerous for

				people's health
	Call for Environmental Awareness and Action			weakness, dizziness and sometimes loss of consciousness wear light clothing and drink more water, awareness campaigns, strong laws and the education about environment

**Interpretation:**

Drawing on the deductive thematic analysis by using coding units, the researchers have found out that the news report is regarding the climate change rapid urbanization worsens heat crisis under study contains content related to the overall theme of creating awareness and public engagement for urbanization worsens heat crisis to mitigate the impacts of climate change. The report also encompasses three main themes of “Environmental Disasters and Crisis Events”, “Public Awareness and Education” and “Policy and Governance”. Simultaneously, the sub themes covered in the reports are “Floods and Heatwaves”, “Disaster Preparedness and Response” and “Poor Urban planning”

“Climate risk spurs insurance need”. (2025, April 24). *The Express Tribune*. <https://tribune.com.pk/story/2541037/climate-risk-spurs-insurance-need>

Theme	Sub-Theme	Question	Keywords/ Coding Units
1. Economic Implications	1.1 Economic Impact of Climate Change	Coverage of how the changing climate affects Pakistan's economy, particularly in agriculture, tourism, and infrastructure.	Economic Loss, GDP Decline, Infrastructure Damage, Landslides, Stranded Tourists, Agricultural Productivity Reduction.
2. Impacts on Agriculture	2.1 Agricultural Vulnerability	How climate change affecting Pakistan's agricultural output?	Rain-Fed Agriculture, Lack of Resilient Crop Varieties, Agricultural Productivity Reduction, Food Security
	2.2 Water Scarcity and Management	Coverage of how climate change is exacerbating water scarcity?	Govt Negligence and Irrigation Mismanagement,

		issues in Pakistan, which is a crucial concern for both rural and urban populations.	Rainfall Disrupted Threshing, Wet Crop Needs Drying, Water Scarcity, Per Capita Water Availability, Drought-Stricken, River Dryng
3. Policy and Governance	3.1 International Cooperation	Coverage of Pakistan’s role in international agreements like the Paris Agreement or involvement in climate adaptation funds and how these are presented in the media	Need For International Cooperation, Compensation, Global Climate Discussions, IMF Conditions, Climate- Based Project Selection, Carbon Tax, WMO and NMHSS Collaboration, Climate Risk Planning, Monsoon Forecast

**Interpretation:**

Drawing on the deductive thematic analysis by using coding units, the researcher has found out that the news report is regarding the insurance products related to climate change-related damages to mitigate the impacts of climate change. The report also encompasses three main themes of “Economic Implications”, “Impacts on Agriculture” and “Policy and Governance”.

The following pages contain a deductive thematic analysis of the news stories published in daily *The Nation*; “NDMA issues weather alert as Pakistan braces for hail, dust storms”. (2025, April 18). *The Nation*. <https://www.nation.com.pk/18-Apr-2025/ndma-issues-weather-alert-as-pakistan-braces-for-hail-dust-storms>

Theme	Sub-theme	Questions	Keywords / Coding Units
1. Environmental Disasters and Crisis Events	1.1 Floods and Heatwaves	How are these events framed in terms of climate change?	Extreme weather, climate crisis
	1.2 Human Losses	How news reports link climate change consequences with human losses?	House collapse, lightning deaths, injuries
	1.3 Role of NGOs and Civil Society	How newspapers report on the involvement of NGOs in disaster response and climate adaptation projects.	NDMA, civil society, disaster response
2. Impacts on Agriculture	2.1 Agricultural Vulnerability	How climate change affecting Pakistan’s agricultural output?	crop damage, climate impact, harvest loss
	2.2 Water Scarcity and Management	Coverage of how climate change is exacerbating water scarcity issues in Pakistan	N/A

3. Economic Implications	3.1 Economic Impact of Climate Change	Coverage of how the changing climate affects Pakistan’s economy	infrastructure damage, economic loss, agriculture decline
	3.2 Climate Change as a Barrier to Development	How the media frames climate change as a challenge for achieving SDGs	development delay
4. Climate Justice and Social Inequality	4.1 Vulnerable Populations	How climate change is disproportionately affecting marginalized communities?	N/A
5. Policy and Governance	5.1 Government Response and Action	How newspapers report on government’s climate change policies and programs	NDMA, NEOC, government advisory, preparedness
	5.2 International Cooperation	Coverage of Pakistan’s role in global climate agreements	N/A
	5.3 Disaster Preparedness and Response	Media coverage of how prepared Pakistan is for extreme weather events	alerts, warnings, planning, early warning systems
6. Public Awareness and Education	6.1 Media's Role in Raising Awareness	How newspapers are educating the public on climate change	awareness, climate education, public advisory
	6.2 Focus on Scientific Findings vs. Popular Narratives	Whether media relies on science or sensationalism	N/A
7. International Climate Discourse and Pakistan	7.1 Climate Change in Global Context	Coverage of Pakistan’s role in global climate discussions	N/A
8. Media Framing and Representation	8.1 Framing of Climate Change	Language and metaphors used in climate coverage	climate emergency,

**Interpretation**

The above coding sheet shows that how Pakistani Media particular *The Nation* is reporting on climate change. Drawing on the deductive analysis by using coding units, the researchers have found out the news report is focus on disasters such as heatwaves and extreme weather climate linking in to climate change. The news report shows government warnings; human loses and agriculture damages from National Disaster Management authority (NDMA). The study also reflects about Government policies, public awareness and Media framing and representation.

However, some areas such as water scarcity, economic impacts, and global climate discussions are still missing or underreported. Overall, the media covers climate change mainly through immediate events and government actions but needs to improve in showing the long-term impacts, solutions and the role of vulnerable communities.

“Pakistan requires special financial assistance to cope with climate change: PM”. (2025, April 23). *The Nation*. <https://www.nation.com.pk/23-Apr-2025/pakistan-requires-special-financial-assistance-to-cope-with-climate-change-pm>

Theme	Sub-theme	Questions	Keywords / Coding Units
	1.1 Floods and Heatwaves	How are these events framed in terms of climate change?	N/A

1. Environmental Disasters and Crisis Events	1.2 Human Losses	How news reports link climate change consequences with human losses?	N/A
	1.3 Role of NGOs and Civil Society	How newspapers report on the involvement of NGOs in disaster response and climate adaptation projects.	N/A
2. Impacts on Agriculture	2.1 Agricultural Vulnerability	How climate change affecting Pakistan’s agricultural output?	N/A
	2.2 Water Scarcity and Management	Coverage of how climate change is exacerbating water scarcity issues in Pakistan	N/A
3. Economic Implications	3.1 Economic Impact of Climate Change	Coverage of how the changing climate affects Pakistan’s economy	Economic loss Floods damages
	3.2 Climate Change as a Barrier to Development	How the media frames climate change as a challenge for achieving SDGs	Employment loss Livelihood
4. Climate Justice and Social Inequality	4.1 Vulnerable Populations	How climate change is disproportionately affecting marginalized communities?	Vulnerable groups, laborers, disadvantaged
5. Policy and Governance	5.1 Government Response and Action	How newspapers report on government’s climate change policies and programs	Government program , worker rights , policy
	5.2 International Cooperation	Coverage of Pakistan’s role in global climate agreements	N/A
	5.3 Disaster Preparedness and Response	Media coverage of how prepared Pakistan is for extreme weather events	alerts, warnings, planning, early warning systems
6. Public Awareness and Education	6.1 Media's Role in Raising Awareness	How newspapers are educating the public on climate change	public education, rights advocacy
	6.2 Focus on Scientific Findings vs. Popular Narratives	Whether media relies on science or sensationalism	N/A
7. International Climate Discourse and Pakistan	7.1 Climate Change in Global Context	Coverage of Pakistan’s role in global climate discussions	N/A
8. Media Framing and Representation	8.1 Framing of Climate Change	Language and metaphors used in climate coverage	climate emergency,

**Interpretation**

Using deductive analysis using coding units, the researchers found that news reports focused on the

financial burden of climate-related disasters such as the 2022 floods, which caused \$30 billion worth of losses. The report also links climate change to

employment challenges, particularly for workers and economically vulnerable groups.

In addition, the story reflects government policy initiatives, including social protection programs and vocational training for climate resilience. It underscores Pakistan's call for international financial assistance, highlighting the need for international cooperation to combat climate vulnerability. The presence of international labor representatives and appreciation of Pakistan's efforts further supports the story of international engagement.

Unlike previous reports that focused mainly on extreme weather events, this story brings attention to long-term economic impacts and social inequality. It helps address previously underreported topics such as climate justice, international cooperation, and development barriers. Overall, this coverage broadens the scope of climate change reporting by linking environmental issues to labor rights, economic planning, and international support mechanisms.

## CONCLUSION

The study highlights that the growing population of Lahore and the climate change are making this city hotter every year. Just like other cities of the country, Lahore also had four pleasant seasons: summer, autumn, winter and spring however for the past few years, things have been changing drastically. Consequently, Lahore now faces only two extremes: heat-waves and smog. The drastic change in the weather has made its residents' lives harder and more uncomfortable. The article presents multiple themes to its readers, among which the first themes is Rapid Urbanization. Due to rapid urbanization, the city has been expanding quickly including more roads, housing schemes, industries and buildings. The projects have been increasing day by day to meet the needs of the growing population. But the damage that has been done to make these developments possible is irreversible: green areas are totally disappearing as trees are constantly being cut down. In the maintaining the temperature, and cooling the air along with providing shades, trees have always been playing a major role but removing them, for the sake of construction, Lahore is becoming hotter every day and is making residents' lives more difficult to live in summers. The study also reflects another theme which is Climate Change and Rising Temperatures.

It has been noticed that the temperature of Lahore has been rising every year. One cannot say that it is happening randomly rather this is happening because of global climate crisis. The data reveals a specific trend: summers for past few years becoming hotter than before and due to this extreme heat lasts longer. Ultimately, the high temperatures can be dangerous for people's health and it also affects daily lives of people in many ways. Some serious conditions like Heatstroke has become common in Lahore due to extreme heat. Another prominent theme in the article is the Loss of Green Spaces known as Deforestation. Maintaining temperature is highly important to make life more livable and that is only possible if cities are kept cooler. Parks, gardens, and tree-lined streets play important role to keep the temperature stable. In Lahore, due to high population spaces are utilized for construction. When the green places are replaced with new concrete buildings and roads, the heat is absorbed by the ground during the day and is released back during night making the entire city hotter even after the sunset. This problem is known as Urban Heat Island Effect. Poor Urban Planning is another theme highlighted by the writer. While expanding the city, no such attention and importance has been given to the environment. Also, it expanded too fast without noticing whether green areas have been maintained or not. The planning also did not include how to control pollution too. These unplanned steps for the city have caused issues like water shortages, dirty air and sever heat, all of which are affecting the residents' well-being. Moving on to another theme Health and Safety Concerns, the writer discusses a major point to be noticed that high temperature is dangerous for everyone, especially elderly and children. It causes weakness, dizziness and sometimes loss of consciousness too. Keeping the issues in mind, the government has announced to stay indoors, wear light clothing and drink more water. Even though these steps are necessary and helpful but they only present temporary solutions.

The study highlights for the Need for Long-term Solutions which is another theme. According to the opinions of experts, only thoughtful planning and long-lasting actions can bring the real change. Also, they suggest to plant more tree and protect the green areas. Moreover, the city., planning should include climate concerns as well as awareness among public

about how they can play their role in environment. If these steps are not taken, Lahore will keep getting hotter and the heat will affect not only health but also farming, economy, and jobs. The last important theme in the story is Call for Environmental Awareness and Action. The writer warns by saying that the situation can get worse if no steps are taken against the climate change. The concerns regarding climate change must be taken seriously by the government as well as the public. The damage can be reversed or it can be totally stopped by some steps, for instance: awareness campaigns, strong laws and the education about environment. To conclude, the article does not only talk about weather, it talks about how human actions like unplanned building and cutting trees are harming their environment. It is a warning situation warm city like Lahore is becoming hotter and can be unsafe in the future to live in. This will happen if no specific steps are taken. The need of the time is smart planning, more greenery and a better understanding about climate change which will make cities livable for future generations.

The study highlights that in an interview with the media, the managing director of the Society of Actuaries (SOA), Andrew Peterson, emphasized the necessity of introducing additional insurance products related to climate change-related damages. The hailstorm that happened recently in Islamabad and that farmers, crops, and mountains that had had flash floods were all vulnerable to extreme weather and those with ordinary cars or solar panels need insurance cover as well and there was a gap in Pakistan between the insurance industry and the general public. Experts said that farmers didn't know enough about the crop insurance products they could buy, and insurance companies didn't seem to be doing much in the industry either. The number of businesses were offering flood and drought insurance in Punjab and Khyber-Pakhtunkhwa. This was a solution that Pakistan and the region desperately needed, and it was even more important than theft insurance. They emphasized the importance of promoting actuarial education in Pakistan to strengthen the insurance industry, which would ultimately support product innovation and development. Since its inception in 1889, SOA has grown to include more than 34,000 members. Its goal is to improve actuarial knowledge and assist actuaries

in providing relevant, expert advice on issues affecting society and finances. Statistics are used by actuaries to analyze risk and make informed decisions. Insurance, funding, healthcare all depend on severely on actuaries. The important work of actuaries is to approach and legalize financial models, assisting businesses in turning risk into opportunity. The profession was also in demand around the world and urged young people in Pakistan to get an actuarial education. Concessions on actuarial preparation ingredients and exams, grants for promising students, and partnerships with local universities to promote awareness and rise capability are among the SOA initiatives in Pakistan. Pakistan has observed progress in the actuarial profession, with a 17% rise in candidates appearing for the SOA examination in 2024. There are over 1,700 SOA affiliate members based in Pakistan at the moment. "As SECP (the Securities and Exchange Commission of Pakistan) mandates every insurance firm to establish an actuarial function, the demand is set to rise sharply. Our findings show that all the news stories under the study have the major theme "Environmental Disasters and Crisis Events", it means that all the stories has somehow narrated tales about the environment, disaster, human losses and role of NGOs and civil society, as described in the codebook. The "Policy and Governance" theme was also repeated in all the news stories. This theme underly the subthemes like government response, international cooperation and disaster preparedness. The "Economic Implication", is one of the important themes, which was surfaced in the stories, only twice. Under this theme stories narrated that how climate damage crops, orchids and infrastructure and how it halts development projects. The "Climate Justice and Social Inequality" theme has the same frequency of appearance as the earlier theme had. This theme elaborates the concept of the marginalized and vulnerable people of the society that how the climate events disproportionately affect them. The theme "International Climate Discourse and Pakistan" was also repeated two times. This theme found the Pakistan international position in the climate change related discourse, that how much Pakistan contribute to the global emissions and how much share it got of the climate risk. The one major theme "Public Awareness and Education" which should have a high frequency, but repeated only once.

The societies like Pakistan have much need of awareness and education regarding climate change, but this subject is less seen in the media and in the stories considered for the current study.

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