



An Analysis Of Media Portrayal Of Climate Change In Pakistan: 2010-2019

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Abstract

Climate change is a global phenomenon; its outcome effect societies around the world. At Current, Pakistan is highly vulnerable due to climate change. The present study evaluate the media portrayal of climate change in Pakistan. In this study, the researcher analysed five climate issues (1) Climate Change & Global Warming (2) Water Scarcity and Needs of Dam in Pakistan (3) Agriculture & Food Security (4) Flood in Pakistan and (5) Drought in Pakistan. The study was based on content analysis and news articles of leading four newspapers (The Nation, The News, and Nawa-i-Waqt and Jang) were examined during the years 2010 to 2019. Moreover, the researchers also find out that all four newspapers highly covered three issues (climate change & global warming, Water Scarcity, Flood in Pakistan), however, all newspapers neglected the other two remaining issues (Agriculture & Food Security and Drought in Pakistan). Hence, overall articles treatment on portrayal of climate change in Pakistan were remain very positive toward the solution of climate issue.

Keywords: Media portrayal, Climate Change & Global Warming, Water scarcity.

Introduction

Climate change is a global concern as it effects on every aspects of life. Today, climate changes have become one of the greatest threat for development and welfare of humankind. Climate change has large impact on atmosphere, biosphere, agriculture, temperature increase, health sector, rain, ecosystem, forestry, sea and water levels in Pakistan. When these environmental changes affects the natural system, the quality of life of all living things are affected indirectly or directly (Naeem, 2019). Climate change is not about reducing gas emissions, it's about human dignity and social reliability. It's about how we live and sustain ourselves; how we ensure that the most poor and vulnerable amongst us are protected, how we discourse complex issues in a way that doesn't lead to more injustice and how we patent this responsibility that is upon us (Ghani, 2013). The World Bank and International Energy Agency in their latest report warned that we are heading for a 4 degree Celsius than world. The consequence of climate change is alarming; not only will be there more deadly floods, hurricanes, super storms, drought, heat waves but also there will be declining food stock, extreme water scarcity and loss of human life (World Bank, 2018). This is not a debate about some distant future; it might all happen in our life time. If countries fail to act and greenhouse

gas emissions aren't reduced, we are dooming our future generation to a life where resources are limited and millions of lives are under risk either through disease, water scarcity, loss of livelihood, displacement or possible war (Ghani, 2013). Climate change is a serious risk to poverty reduction and could undo decades of development efforts (Olufemi Adedeji et al, 2014). Environment variation have a huge impact on atmosphere, biosphere, agriculture, temperature increase, health sector, rain, ecosystem, forestry, Sea and water level. When these climate changes effect the natural system, it may affect the living being indirectly or directly (Kakade, et al., 2013). In Asian and African countries, systematic and correct information about climate change is one of the first steps towards emerging mechanisms (Tagbo, 2010). Now a days, climate changes have become one of the major challenges for Pakistan; an agrarian country. Pakistan falls among those top 8 states in the world which are highly vulnerable to climate change (Choudhry, 2016). Pakistani glaciers are expected to melt by 2035 which will have terrible impact on fresh water flow. Pakistan is basically agrarian based economy, this sector contributes the 21% GDP. Pakistan has the 135th position in term of (CO₂) releases (Naseer, 2013) and moreover unluckily has been rated 7th in term of risk to climate change (Global Climate Risk Index 2017). Agricultural sector is the backbone of Pakistan and have a maximum proportion with 4/5th irrigated crop land in the South Asian regions. Apart from its hazard to flood and famine, the state is also equally susceptible to internal and outdoor air pollution (Shakoor et al., 2011). Pakistan is placed in that areas where air hotness is estimated to be higher than average global temperature that's why Pakistan is exceptionally liable to climate fluctuations (IPPC, 2007A). Due to environment inconsistency, some regions will have advantage but some areas will be extremely suffering with the weather changes. Environmental changes will not merely influence the agricultural production, economic steadiness; but also effecting stock and demand stability of agricultural supplies, profitability, trade and prices (Kaiser & Drennen, 1993). Production is being effected by a number of variables comprising rainfall pattern, temperature hike, water accessibility, variations in sowing and harvesting dates and lands sustainability (Kakade, et al., 2013). The durations of Pakistani cropping date has also clearly condensed in South Punjab and Baluchistan with the onward fluctuation in sowing and harvest time. It indicates that earnings from traditional ways are certainly not more enough to support many families. Global warming would be enhanced the frequency and intensity of thrilling events i.e. drought, flood, and cyclone that would harm the agricultural productivity (Baig, 2020). The performance of Pakistan's agriculture sector is depends upon surface water that is under stress (Baig & Amjad, 2014). The latest devastating environment happenings like the massive flood in Pakistan and India and the Hurricane Katrina in the United States. The obstinate drought in Australia, Pakistan, China, India and Texas are the consequences of enlarged temperature due to global warming. Throughout the 21st century, climate disasters have increased five times as mostly killed or effected seventy times as many people. Being metrological diversity, Pakistan is one of the excessive catastrophe driven states in the worldwide (Ahmad, et al., 2011).

Media plays a dynamic role in enlightening the masses and government administration to keep and protect natural resources of climatic disorder in the interest of future generation. Sustainable progress of world will be achieved through caring the atmosphere in a sensible consumption of natural assets. Countries both the rich and poor have an equal stake in this stewardship of the earth (Sonwalkar, 2002). The real stability of our earth rests on the sustainability of earth environment. In this way, media role is very critical in raising awareness in common masses and conveying a progressive behavior change among society in enlightening the anthropogenic environmental changes (Yadav & Rani, 2011). The media has

prime responsibility to set agenda and forming the public mind about issues (Khan et al, 2017) like climate change, its effects and address the need of actions.

In a country like Pakistan, that is disaster vulnerable and keeps a dynamic media, it's very vital to find out the print media role on the portrayal of climate change. It's relevant to mention that through literature review, climate change and its effect are very well researched, lots of studies have been done in the many countries in the world (Rybalko, 2011). Riaz (2018) found in his study that media can play a significant role in sensitization of people regarding the issue of climate change. Over a past few eras, there is increase in worldwide media coverages on issue of climate change due to it's highly news values. In the time period of 2010-2019, highly media coverage about climate change around the world was seen especially in UK, USA, Japan, and Mexico (Boykoff et al, 2019).

But in Pakistan, no earlier studies were found on "An Analysis of Media Portrayal of Climate Change in Pakistan: 2010-2019". Consequently, it is very essential to conduct this kind of studies to set the trend of newspaper coverages about the significance of climate change issues. In Pakistan, usually climate issue and natural disaster are ignored and its urgency are neglected. The conventional media seem like not to be interested in climate issues and its reporting. So, in this study, researchers are trying to identify that how Pakistani print media portrayal climate issue, how media play a role as a trendsetter, and evaluate its reporting frequency in Pakistani newspapers. It is estimated that this research would provide platform for increasing the spread of the media reporting in Pakistan relating to climate change. It would also bring growth in public wakefulness of the linkages between climate issues, social problems and the wider economy.

Climate Change and Media

Due to severe impacts of climate change disparity, that's why it is a demand to study the media portrayal on different climate issues like climate change & global warming, water scarcity & need of dams in Pakistan, agriculture & food sector, flood in Pakistan, and drought in Pakistan. Now a days, mass media has become the dominant part of life and society. Apart from to enlighten and to inform, awareness is also key role of media to highlight the important issues like climate change and its disasters. Media knows the significance of environmental and climate change news. Specially, Scientists' communication about climate and policy maker's statements and their suggestions through mass media has been a theme of deep interest and making public understanding about the climatic issues (Kakade, et al., 2013). National press, regional press and small and local language newspapers they all give the coverage to climate change and natural disaster's according to their policy. These coverages help the public to know the environmental & climate change effects, warnings and its preventive actions (Christian & Nordenstreng, 2010).

Pakistan: its Climate Metrology

In metrological perspective, Pakistan is one of the highly extreme catastrophic state in the globe (Ahmad, et al., 2011). In coastal areas of Pakistani, climate condition is dry and also hot while toward the North East plateau winter are commonly extremely cold and dry (Sajjad, 2004). Pakistan has four seasons annually listed as,

1. November to February scheduled as cold season
2. Pre monsoon (hot) starts from March to end mid-June
3. Monsoon begin from mid-June to in mid-September
4. Post monsoon start from mid-September to October.

For the duration of summer, weather is tremendously hot and humidity range falls among 25% to 50%. During day time, temperature may reach 49 c in a plain regions, while in winter season, the average temperature ranges from 4 c to 20 c. In the Northern parts, Mercury mostly drops under the freezing points. The main regions of country are arid to semi-arid, it's annually rainfall ranges from 760 mm to 2000 mm. Its 3/4th range has less than 250 mm rainfall and 20% area has only 125 mm rainfall (Naeem, 2020).

Why this research and what contribution will it make?

Until now, despite the significance of climate issue there are very few researches have been done in a very limited time periods just 2 to 3 years in Pakistani media perspective while, in this study time period has been selected for a 10 years. In an earlier few researches examine only the coverage of news stories about issue of climate change whereas, in this study researcher fill this gap and examine the published articles in two English and two Urdu newspapers. In past existing literature researcher examine mostly print media coverage or discourse analysis about 2 or 3 climate issues while in this study researcher did both qualitative and quantitative analysis with depth study on a five research issues, i.e. Climate Change & Global Warming, Water Scarcity & Need of Dams in Pakistan, Agriculture & Food Sector, Flood in Pakistan, and Drought in Pakistan with relation in the suggestive approach, critic approach or appreciative approach. So, this study is a major milestone to fill gap of the existing literature and researcher trying to identify print media role as a trendsetter, evaluate its framing techniques, and check its reporting frequency in Pakistani leading mainstream newspapers.

Present Study

Present study was conceptualized about role of government regarding climate change issues and coverage of print media i.e. government policies regarding climate change were found as appreciative, suggestive or critical by print media. The study was based on both quantitative and qualitative approaches and the data was analyzed to find the results about the coverage of the issue of climate change in the national newspapers of Pakistan. Furthermore, this is a portrayal study to investigate the image of the government of Pakistan regarding the issue of climate change. Portrayal studies are getting tremendous popularity among media scholars across the globe.

Research Questions

Research Questions#1: How much total coverage is given by all four newspaper on all research issues? And which one newspaper gave more coverage on issues among the all of four newspaper?

Research Questions#2: How much total treatment is given by all four newspapers on all research issues CC/GW, W/D, A/F, ND (F) & ND (D) during 2010 to 2019?

Research Questions#3: What are the similarities and differences between these selected four newspapers Daily The Nation, Daily The News, Daily Nawa-i-Waqt and Daily Jang on the issues of climate change?

Method

Current research study was basically qualitative and quantitative in nature. Content analysis technique used to evaluate the publish articles content in selected four newspaper. "Any systematic procedure devised to examine the content of recorded information" (Walizer and Wiener, 1978). Study focused to count number, size, space, frequency and actual

measurement of editorials and articles. Quality of content was checked through editorial and article words framing analysis either it suggestive, critics or appreciative. For content analysis on “An Analysis of Media Portrayal of Climate Change in Pakistan: 2010-2019” two national English dailies (The Nation and The News) and two Urdu dailies (Nawa-i-Waqt and Jang) were selected. These four English and Urdu newspapers’ are very influential on public and policy makers in Pakistan All these national dailies are popular, main stream, large circulated, claims to be objective and balance regarding their coverage (Sharif & Medvecky, 2018).

Measures

The coding sheet was designed to measure the content of selected newspapers. Content was measured quantitatively as well as qualitatively. Universe of study was all articles published in selected newspapers which were related to research issues i.e. Climate change & Global Warming, Water Scarcity & Need of Dams in Pakistan, Agriculture & Food Sector, Flood in Pakistan, and Drought in Pakistan during 1st January 2010 to 31 December 2019. The time period of 10 year during 2010 to 2019 was selected for this research work because during these years, such as drought, earthquake, water scarcity, global warming, temperature increase, disease related health and every year with consistently drought and floods create the serious damage in Pakistan which are due to the climate change. In the duration in 21st century, climate disasters frequently arose more than five times and it killed or affected seventy times higher. During 2010 to 2019, an average of 32 climate disasters was reported annually; that’s why, this time period has been selected for research. Articles considered unit of analysis in which words, sentences or whole paragraphs were about research issues. Population of study was articles in which the words: environments issue, climate change, global warming, water scarcity & needs of dams, environmental & climate change’s warnings and its Preventive actions, natural disaster, climate change effects on agriculture & food, flood in Pakistan, Natural disaster rehabilitation and reconstruction activities, drought, moon soon rain, disaster relief fund activity, food security, weather changes, temperature increase, global warming and disease through climate change.

Quantitative Measure: Quantitative measurement can be measured in figure and digit. Quantitative measurement of editorial and article was done under five issues i.e. Climate change & Global Warming, Water Scarcity & Need of Dams in Pakistan, Agriculture & Food Sector, Flood in Pakistan, and Drought in Pakistan related to climate changes includes in quantitative measurement.

Qualitative Measurement: Qualitative measurement refers as the measurement according to the nature of content that related to specific category designed by researchers. Qualitative measurement of editorial and article was done under five issues i.e. Climate change & Global Warming, Water Scarcity & Need of Dams in Pakistan, Agriculture & Food Sector, Flood in Pakistan and Drought in Pakistan with respect to appreciative, suggestive or critics.

Directions of Contents:

1. Climate Change & Global Warming
2. Water Scarcity and Needs of Dam in Pakistan
3. Agriculture and Food Security
4. Flood in Pakistan
5. Drought in Pakistan

Categories Means and How Developed Them.

In research study, categories means is that five research issues Climate change & Global Warming, Water Scarcity & Need of Dams in Pakistan, Agriculture & Food Sector, Flood in Pakistan, and Drought in Pakistan which were developed and formulated on the bases of published content of articles in all four newspapers.

Categorization and Their Rules

Climate change issues were divided into five categories on the bases of content analysis. For accomplishment of research study of content analysis these rules were made:

Table X: Content Analysis Categories and Their Rules

Variable	Categories/Issues	Rules
Issue 1	Climate Change's & Global Warming its Warnings and Preventive Actions (CC/GW)	An article include, rise in heat weaves due to global warming , rise in average temperature, extreme weather events, melting of glaciers, National & International universal agreement to discuss and control climate change i.e. Kyoto Protocol, Paris agreement, enacting and enforcing climate Laws & Act, environmental protection laws, climate change adaptation and mitigation concerns, Ozone layer reduction, CO ₂ ,GHG emissions and mitigate
Issue 2	Water Scarcity and Needs of Dam in Pakistan (W/D)	An article deals with the, water scarcity in Pakistan, climate changes effects on water sector, water policies & management, World Water Forum, water storage dam, needs of Kalabagh dams, needs of big water reservoir in Pakistan.
Issue 3	Agriculture & Food Security (A/F)	An article which concentrate on, climate changes effect on agriculture production and food security, inconsistency in crop growth cycle, variations in seeding and harvesting dates, food accessibility & Food utilization, agriculture & Food management policies in Pakistan
Issue 4	Flood in Pakistan ND(F)	An article related to, Natural disaster flood in Pakistan, moon soon rain, Flood Forecasting System, flood warning system, alertness for floods, flood relief fund
Issue 5	Drought in Pakistan ND(D)	An article deals with, Natural disaster drought in Pakistan, shortage of rain, warning for drought, drought relief fund, role of Pakistan Metrological Department, Drought mitigation & precaution measures, Drought Policy

Categories of Coding Sheet

To analyze the data, the researchers designed coding sheet. Furthermore, researchers divided coding sheet into three categories (Suggestive, Critic, or Appreciative). Every article slant would be measured as one of three main coding categories, Suggestive, Critic, or Appreciative on the bases of framing given by newspaper on these research issues i.e. CC/GW, W/D, A/F, ND (F) & ND (D).

Suggestive Approach

An article would be considered suggestive if the frame was found as;

- If these selective newspapers suggest precaution measurement's and some innovative way to deal with these climatic issues.
- If these selective newspapers create awareness or communicate in this way that these climate issues must take seriously because it is an important for our national survival.

Critic Approach

An article is considered critic if the frame was found:

- If these selective newspapers stance toward the issue in this way, that government are not showing serious attitude and its approaches are not good enough for tackling climate changes.
- If these selective newspapers frame shows, that Pakistani management not made any proper strategies on a real bases and its managing authority only passing political statement.

Appreciative Approach

An article falls into category of appreciative if the frame was found as:

- If these selective newspapers stance determine, that Pakistani government's efforts and policies are good enough about tackling climate change.
- If these selective newspapers admit, that government is moving towards positive development about these climate change issues according to international standards and criteria.

Criteria of Coding Slant

The researchers analyzed all articles of Daily The Nation, Daily The News, Daily Nawa-i-Waqt and Daily Jang from 2010 to 2019 and coding their slant into three distinct categories Suggestive, Critic and Appreciative. The criteria of coding slant of Pakistani newspaper's articles were as follows;

- a. If the number of suggestive paragraphs more than the number of critic or appreciative paragraphs in the entire articles then the article will be coded into suggestive category.
- b. If the number of critic paragraphs in the entire articles would be more than the suggestive or appreciative paragraphs then the entire article would be coded into critic category.
- c. If the number of appreciative paragraphs in articles will be more than that of suggestive or critic paragraphs then the whole article will be treated as appreciative with regard the issue of climate change.

Results:

Table 1: Articles Treatment of The Nation on all issues of research i.e. (CC/GW), (W/D), (A/F), ND (F), ND (D)

Daily The Nation (2010-2019)				
Issues	Total Articles	Suggestive	Critics	Appreciative
5410 Dr. Muhammad Naeem Javed Change In Pakistan: 2010-2019				

Climate changes & global warming (CC/GW)	120 (32%)	84 (70%)	30 (27%)	6 (3%)
Water Scarcity and Needs of dam in Pakistan(W/D)	160 (42%)	89 (56%)	70 (44%)	1 (0%)
Agriculture & Food sector(A/F)	30 (8%)	18 (61%)	12 (39%)	0 (0%)
Flood in Pakistan ND(F)	50 (13%)	28 (55%)	20 (40%)	2 (5%)
Drought in Pakistan ND(D)	20 (5%)	7 (33%)	13 (67%)	0 (0%)
Grand Total	380 (100%)	226 (60%)	145 (38%)	9 (2%)

The above table frequency shows the total article treatment of The Nation during 2010 to 2019 on the all issues i.e. Climate change & Global Warming, Water Scarcity & Need of Dams in Pakistan, Agriculture & Food Sector, Flood in Pakistan, and Drought in Pakistan. According to table result, during the period of 10 years, The Nation published total 380(100%) articles about concerned issues in which 226 (60%) article were favor the stance of suggestion, 145 (38%) articles were against Pakistani policies and treated as criticism and only 9 (2%) articles were written as appreciation. Hence, during period of eight years from 2010 to 2109, most of articles published by The Nation were found in the category of suggestion toward the solution of issues.

Table 2: Total Articles Treatment of The News on all Issues of Research i.e. (CC/GW), (W/D), (A/F), ND (F), ND (D)

Daily The News (2010-2019)				
Issues	Total Articles	Suggestive	Critics	Appreciative
Climate changes & global warming (CC/GW)	173 (50%)	104 (60%)	59 (34%)	10 (6%)
Water Scarcity and Needs of dam in Pakistan(W/D)	69 (20%)	39 (56%)	30 (44%)	0 (0%)
Agriculture & Food sector(A/F)	17 (5%)	10 (57%)	7 (43%)	0 (0%)
Flood in Pakistan ND(F)	69 (20%)	37 (54%)	32 (46%)	0 (0%)
Drought in Pakistan ND(D)	17 (5%)	7 (42%)	10 (58%)	0 (0%)
Grand Total	345 (100%)	197 (57%)	138 (40%)	10 (3%)

The above table frequency shows the total article treatment of The News during 2010 to 2019 on all issues i.e. Climate change & Global Warming, Water Scarcity & Need of Dams in Pakistan, Agriculture & Food Sector, Flood in Pakistan, and Drought in Pakistan. According to table result, during the period of 10 years, The News published total 345(100%) articles about concerned issues in which 197(57%) articles were found in favor of the stance of

suggestion, 138(40%) articles were against Pakistani policies and treated as criticism and only 10(3%) articles were published by the newspapers as appreciation. Hence, during period of eight years from 2010 to 2019, most of the articles published by The News were found in the category of suggestion toward the solution of issues.

Table 3: Total Articles Treatment of Nawa-i-Waqt on all Issues of Research i.e. (CC/GW), (W/D), (A/F), ND (F), ND (D)

Daily Nawa-i-Waqt (2010-2019)				
Issues	Total Articles	Suggestive	Critics	Appreciative
Climate changes & global warming (CC/GW)	70 (14%)	44 (63%)	26 (37%)	0 (0%)
Water Scarcity and Needs of dam in Pakistan(W/D)	186 (36%)	102 (55%)	84 (45%)	0 (0%)
Agriculture & Food Sector(A/F)	50 (10%)	28 (55%)	22 (45%)	0 (0%)
Flood in Pakistan ND(F)	156 (31%)	58 (37%)	95 (61%)	3 (2%)
Drought in Pakistan ND(D)	48 (9%)	12 (24%)	35 (73%)	1 (3%)
Grand Total	510 (100%)	244 (48%)	262 (51%)	4 (1%)

The above table frequency shows the total article treatment of Nawa-i-Waqt during 2010 to 2019 on all five issues of the study. According to table of results, during the period of 10 years, Nawa-i-Waqt published total 408(100%) articles about concerned issues in which 192 (47%) articles were found in favor of the stance of suggestion, 213 (52%) articles were found against Pakistani policies and treated as criticism and only 3 (1%) articles were published in the category of appreciation. Hence, during the period of eight years (from 2010 to 2019), daily Nawa-i-Waqt published most of articles in the category of criticism regarding government's insufficient policies toward issues.

Table 4: Total Articles Treatment of Jangon all Issues of Research i.e. (CC/GW), (W/D), (A/F), ND (F), ND (D)

Daily Jang(2010-2019)				
Issues	Total Articles	Suggestive	Critics	Appreciative
Climate changes & global warming (CC/GW)	65 (32%)	36 (55%)	28 (43%)	1 (2%)
Water Scarcity and Needs of dam in Pakistan(W/D)	78 (39%)	47 (60%)	31 (40%)	0 (0%)
Agriculture & Food Sector(A/F)	10 (5%)	6 (55%)	4 (45%)	0 (0%)
Flood in Pakistan ND(F)	42 (21%)	18 (42%)	22 (53%)	2 (5%)

Drought in Pakistan ND(D)	5 (3%)	0 (0%)	5 (100%)	0 (0%)
Grand Total	200 (100%)	107 (53%)	90 (45%)	3 (2%)

The above table frequency shows the total article treatment of daily Jang during 2010 to 2019 on the all five issues. According to table result, during the period of 10 years, daily Jang published total 200(100%) articles about concerned issues in which 107(53%) article were favor the stance of suggestion, 90(45%) articles were found against Pakistani policies and treated as criticism and only 3(2%) article were published as appreciation. Therefore, during period of ten years from 2010 to 2019, daily Jang published most of the articles in the category of suggestions towards the solution of issues.

Table 5: Comparison of Articles' treatment of The Nation, The News Nawa-i-Waqt and Jang on the Issues of Climate change in Pakistan 2010-2019

News Paper	Total Articles	Suggestive		Critics		Appreciative	
		No's.	%	No's.	%	No's.	%
The Nation	380	226	60%	145	38%	9	2%
The News	345	197	57%	138	40%	10	3%
Nawa-i-Waqt	510	244	48%	262	51%	4	1%
Jang	200	107	53%	90	45%	3	2%
Total	1435	774	54%	635	44%	26	2%

The above frequency distribution shows comparative article treatment of all four newspapers (The Nation, The News, Nawa-i-Waqt and Jang) on the issue of climate changes in Pakistan during the period from 1st January 2010 to 31st December 2019. This comparative analysis shows that all four newspapers (The Nation, The News, Nawa-i-Waqt and Jang) published articles, 380(100%), 345(100%), 510(100%) & 200(100%) respectively. According to the results, Nawa-i-Waqt published 244(48%) articles in the category of suggestion for the tackling of the issue of climate changes in Pakistan. It shows that Nawa-i-Waqt played a better role and published more articles suggestively as compare to other three newspapers. Whereas, daily Nawa-i-Waqt also published 262(51%) articles written with the slant of criticism on poor planning and mismanagement of the Government of Pakistan about the issue of climate changes in Pakistan. The table of analysis illustrates that Nawa-i-Waqt published more articles with the slant of criticism than rest of other three newspapers (The Nation, The News and Jang). According to results, The News published 10(3%) article with the slant of appreciation. It shows that The News published more articles as stance of appreciative as compare to The Nation, Nawa-e-Waqt and daily Jang during selected periods of 10 years. The result shows that all four selected newspapers published total 1435(100%) articles on the issue of climate changes in Pakistan in which 774(54%) were written in the category of suggestion, while 635(44%) articles' slant was based on criticism toward Pakistani poor management about issues and 26(2%) written in appreciation stance. Hence, overall article treatment of all four newspapers on the issue of climate changes in Pakistan was found as suggestive which shows that Pakistani newspapers played a vital role to overcome the issues.

Findings

Research Questions#1: How much total coverage is given by all four newspaper on all research issues? And which one newspaper gave more coverage on issues among the all of four newspaper?

All the articles were analysed by the researchers and found that all four newspapers published total 1435 articles on research issues CC/GW, W/D, A/F, ND(F) & ND (D) from 2010 to 2019. From total 1435 articles, Daily The Nation published 380 articles, Daily The News publish 345 articles, Daily Nawa-i-Waqt published 510 and while Daily Jang published 200 articles in a research time period of 10 year. Moreover, result illustrate that Daily Nawa-i-Waqt published more articles as compared to other remaining three newspapers during 2010 to 2019. Results also indicate that Daily Jang has written less articles on all research issues.

Research Questions#2: How much total treatment is given by all four newspapers on all research issues CC/GW, W/D, A/F, ND (F) & ND (D) during 2010 to 2019?

All the results analysed by the researchers and results show that all four newspapers published total 1435 articles on research issues CC/GW, W/D, A/F, ND (F) & ND (D) from 2010 to 2019. From total 1435 articles, 774(54%) articles are slanted as suggestive, 635(44%) articles are framed as critic approach and while 26(2%) articles are slanted as appreciative.

Research Questions#3: What are the similarities and differences between these selected four newspapers Daily The Nation, Daily The News, Daily Nawa-i-Waqt and Daily Jang on the issues of climate change?

After the analysis of articles all four newspapers Daily The Nation Daily The News, Daily Nawa-i-Waqt and Daily Jang on the selective five issues of climate change in Pakistan during the research time period of 2010 to 2019, the result indicates that all selected four newspaper shows suggestive behavior in its articles more than 50% for the solution for all issues of climate change in Pakistan. It is strong indication that all newspapers play a suggestive and better role to overcome the issue. The study result shows that all newspapers wrote below than 40% editorials on critic approach toward poor management about the issue of climate change in Pakistan. The researcher also dig out that all four newspapers gave less than 5% publication to the stance of appreciative. Some other similarities are also found that all four newspapers gave highest coverage to categories of CC/GW, W/D & ND (F) in its articles publication while on the categories of A/F & ND (D) all newspapers gave less articles publications. Moreover, result shows that Daily The Nation and Daily Nawa-i-Waqt newspapers published more articles as compared to Daily The News & Daily Jang newspapers of newspaper during 2010 to 2019. The researcher found that Daily The Nation and Daily Nawa-i-Waqt group gave more coverage on the issue of W/D whereas Daily The News gave more publication to CC/GW category and Daily Jang gave more importance to research issue ND(F) during research period of 2010 to 2017. On the other hand, a big difference found is that Daily Nawa-i-Waqt gives extra coverage and more importance to the issue and its shows the worth of issue as compared to other three newspapers. It also elaborates that Daily Jang has written less article on selective 5 research issues.

Conclusion

In this study the findings of research revealed a suggestive trend and show positive role of newspaper in coverage of climate change in Pakistan. At a management levels, climate change had not ever been considered as a severe and genuine issue until just when the country experienced frequently global warming, water scarcity and natural disasters (floods

& drought). This research also explored the role of Pakistani newspapers during natural disasters. A large section of research explored the suggestive and positive role of print media in disaster management (flood & drought) in different aspects. Mostly, newspaper role in educating victims and latent victims their rehabilitation process and then stimulate disaster management to influence and prompt national and international donors which are marvelous achievements and splendid ability of print media. These climate change devastated Pakistani economy and well-being of people continuously in shape of flood and drought. Through, climate change Pakistan is facing serious water scarcity and it closely relates with agriculture and food sectors. Now, it's time to build dams for overcome the water crises in Pakistan. Pakistani print media especially Daily Nation and Daily Nawa-i-Waqt publish lots of articles on issue of Water & Needs of Dam in Pakistan. These recent climatic disasters have enhance the requisite for proper planning and adopting strategies for earlier to minimize the effect. Through the print media publication on issue of climate change it was found that now more consciousness is initiated among policy makers quite today than before. These newspaper study have provided a guideline to governments in getting practical economic development by ensuring agriculture and food security, water and enhancement of dams in Pakistan. This study also discuss that press bring growth in public awareness and its linkages between climate change issues with social problems which effects the wider economy. Another vital contribution this study is to the strengthening of local media networks and improvement of media relations in the region on climate change reporting and coverage. This study also have a worth to building public understanding and public perception about climate change through the attention of Pakistani mainstream print media. This is because of media coverages and attention towards this issues. It will also serve as a motivational for public to have more concerns and responsiveness.

Suggestion

On the basis of the results of this study, the following policy recommendations are being given for the government and particularly for the relevant organizations for policy making and implementation.

1. Government of Pakistan should adopt international standards for the protection of environment and to minimize the hazardous effects of climate change on the people and land of Pakistan.
2. Media organizations should give high importance to the issue of climate change. They should make this issue a significant agenda of their organizations and give prominent coverage to the news, visuals, articles, columns and devote more space and time of their print and electronic media outlets respectively for the significant coverage of the issue of climate change.
3. The ratio of the media coverage to the climate related news in Pakistani media is much lesser than that in the advanced countries. Most of the news stories appear when some disaster comes in the country and people face it's consequences. In normal circumstances, very few news appear on media regarding the issue of climate change. Media organizations should enhance the coverage of climate related issues in their outlets.
4. Media organizations should design their content for the awareness of masses regarding the issue of climate change.
5. Media organizations should play the role of a bridge between government and public to handle and manage the effects of climate change and to take necessary measure to cope with it.

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