Climate change is a global phenomenon; its outcome affects societies around the world. Due to the systemic effects of climate change, Pakistan frequently suffers from natural disasters. The present study explored the press coverage and framing trends about three climate issues (1) Climate change and global warming (2) climate change and water scarcity (3) agriculture and food security. The study was based on content analysis. In this research, editorials of four newspapers; The Nation, The News, Nawa-i-Waqt and Jang were examined during 2011 to 2018. It was census study and all editorials were examined during the period of 8 years. The results showed that all four newspapers highly covered issues of water scarcity in Pakistan and however, gave less coverage to the issue of agriculture and food security. Thus, overall editorial coverages increase with every passing year and mainstream Pakistani press framing trends were remain very positive and suggestive.

**Key Words:** Climate Change, Mainstream Press, Newspaper Coverage, Framing Trends

**Introduction**

Climate change is the natural happenings, which are affecting the entire world and whole humanity as well as all other living species (Schmidt, A.et al, 2013). Climate change is not about reducing gas emissions but also about human dignity and social reliability. It’s about how we live and sustain ourselves; how we ensure that the poorest 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 consequences of climate changes are alarming; not only will be there more deadly floods, hurricanes, super storms, drought, heat weaves 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 lifetime. 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 (Bashir, 2019). Due to globalization, we are suffering from frequent climate changes and repeated disaster. Mass media can enlighten and update the public about climate changes and its several impacts. Being awaken of environmental variations, can assist public to lead the vigorous and prosperous life (Naeem, 2013).
Radio, television, newspaper, internet and social media take part in constructing the significant views about climate changes (Sonwalkar, 2002). 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 (Dawn, 2014). Sustainable progress of world will be achieved through caring the atmosphere in a sensible consumption of natural assets. The real stability of our earth rests on the sustainability of earth environment (Malik, 2017). 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 like climate change, its effects and address the need for actions. In Asian and African countries, systematic and accurate information about climate changes is one of the first steps toward emerging mechanisms (Tagbo, 2010). Now a days, climate change has come to be one of the major challenges for Pakistan - agrarian base country. Pakistan falls among those top 8th countries in the world which are extremely vulnerable to climate change (Choudhry, 2016). Pakistani glaciers are expected to melt by 2035 which will have terrible impact on freshwater flow. It is basically agrarian based economy, this sector contributes to the 21% GDP of Pakistan, and it is extremely vulnerable due to climate changes. 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). Agriculture is the backbone of Pakistan and country has one of the maximum ratios of with 4/5th irrigated croplands in the South Asian region. Apart from its hazard to flood and famine, the state is also equally susceptible to internal and outdoor air pollution (Shakoor et al., 2011).

According to Pakistani agro climatic classification, its 2/3rd is semi-arid to arid region; are commonly categorized by the low irregular rainfall. In a few decades, circumstance has deteriorated; global warming phenomena have become more obvious. Due to climate changes, average temperature become higher, it increased the risk of melting the glaciers, rising sea levels, floods and abundant droughts in Pakistan (Ghani & Muhammad, 2017). Crop yielding are projected to decline as an outcome which affecting food production and livelihood. For the period of the previous century, universal temperature has increased by approximately 1 degree Celsius and it’s still probable to rise more 1.4 to 5.8 degree Celsius in 21st century (Naseer, 2013). Water scarceness and frequently flooded in every year become a normal routine in Pakistan. Future climate changes would be a key influence on our water possessions and then effect food stock, health sector, industries, transportation and sustainability of ecosystem (Farouqi, et al., 2005).

Pakistan is placed in those areas where air temperature is estimated to be higher than global averages temperature that’s why Pakistan is extremely vulnerable to climate changes (IPCC, 2007).

“Global warming is for real. Every scientist knows that now, and we are on our way to the destruction of every species on earth, if we don’t pay attention and reverse our course.” -Theodore, C., Sorensen

Theodore, C. Sorensen a 21st century writer” words are relevant in the context of South Asia especially under develop and climate most vulnerable country Pakistan. Because, its economic activity is extremely dependent on environment circumstances.

Due to environment inconsistency, some regions will have an advantage while some areas will be ruthlessly affected with the climate change (Kirby et al., 2017). Environmental changes will not merely influence the agricultural production, economic steadiness; but also effecting stock and demand stability of agriculture supplies, profitability, trade and prices (Kaiser & Drennen, 1993). Productivity is being stimulated by a number of variables comprising rainfalls pattern, temperature ramble, water accessibility, variations in sowing and harvesting dates and land sustainability (Kakade, et al., 2013). The durations of Pakistani cropping date have also clearly shortened in Southern Punjab and Baluchistan with the onward shift in sowing time and earlier harvest. This indicates that earnings from traditional sources are no longer enough to support many families (Daud et al., 2017).
In a state, which is catastrophe and retains a dynamic media: it's vital to find out the print media role on the climate change and natural disaster in Pakistan. It's relevant to mention that through literature review, climate changes and its effect are very well researched; lots of studies have been done in the many countries in the world (Rybalko, 2011). Unfortunately, only very few scholarly studies are available in the perspective of Climate change in the mainstream Pakistani press: coverage and framing trends. This study debates the role of print media in coverage of climate changes in Pakistan and its effects on different sectors. In this study four leading newspapers Daily the Nation, The News, Nawa-i-Waqt and Jang have been selected. The researcher efforts to evaluate the comparative role of Pakistani mainstream Press in coverages of climate change, its framing perspective. This study tries to examine how Pakistani print media sets the agenda, how it frames about the climate changes, its effects and know how much mainstream press given coverage to the issues. For this purpose, three research issues namely “global warming, water scarcity, and agriculture & food security” have been chosen in order to check press coverage and framing portrayal toward these issues.

Climate Change Definition

Dunlap and Michelson (2002) define climate changes as “the variation in earth’s global temperature and regional weather pattern over time. This variation can be due to internal forces of earth, like changes in geothermal activity, forces external to the earth, like changes in solar activity, or human activity”. Climate changes are also denoted as “global warming”, or simply global climate change (Dietz & Rosa, 2002).

Climate Change and Press Coverage and Framing Trends in Pakistan

Now a day, mass media has become the dominant part of life and society. Apart from to enlightening and informing, awareness is also key role of media to highlight the important issues like climate changes and its disasters.

Media knows the significance of environmental and climate change news. Specifically, Scientists’ communication about climates 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). All type of media like Television, Radio, newspaper and social media disperse the news at the speed of light (Khan et al., 2017). National press, regional press and small and local language newspapers they all give the coverage to climate changes and natural disaster according to their policy. These coverages help the public to know the environmental & climate changes effects, Warnings and its preventive actions (Christian & Nordenstreng, 2010).

Rational of Selected Newspapers

The researchers in this study selected four newspapers of Pakistan. Out of these newspapers, two of them deals with the field of English and whereas, further two deals with Urdu language. The particular newspapers are Daily the Nation, Daily the News, Daily Nawa-i-Waqt and Daily Jang for content analysis. All these national dailies are popular, main stream, large circulated, claims to be objective and balance regarding their coverage. Furthermore, position of these newspapers is recognized as effective and influential (Kheeshadeh, 2012).

What Can the Press Do?

A newspaper can take full advantage of its readership, to circulate all desired information. The real beauty of print materials is that one can, go back to it, refer it, review and analyse the material at one’s personal choice and suitable time. The Newspaper concentrates on those issues which source of climatic problems as well as, the harmful effects on societies at large (Ford, 1991).
**Why English Press?**

Print media is particularly more reliable as compared to electronic media. In Pakistan, usually well-educated persons, elite class and policymakers read an English newspaper. In relatively, English newspapers are considered as more accurate and accountable (Khan et al., 2017). Daily the Nation and Daily the News are two top English newspapers of Pakistan with having a vast circulation and decent repute among the readers. Their news reporting always provides information with healthy criticism and has a deep concern to educate the general masses (Ghulam Shabir et al., 2014).

**Why Urdu Press?**

Urdu is the national language of Pakistan. Every citizen can read and understand the Urdu newspaper very easily rather than English newspaper. Common man can be easily aware of any issue through the Urdu press. According to Audit Bureau of circulation (ABC) Daily Jang and Daily Nawa-i-waqt are topmost Urdu dailies of Pakistan. Both newspapers have large circulation in vast areas of Pakistan.

**Statement of the Problem**

This research was planned to explore the Climate Change in the Mainstream Pakistani Press. The world has suffered various effects of climate changes like natural disasters, disease growth, flood, earthquake water scarcity and food calamity among others (Lewis & Boyce, 2009). Over a past few eras, there is an increase in worldwide media coverages on issue of climate changes due to its highly news values. In the time period of 2009, highly media coverage about climate changes around the world was seen especially in UK, USA, Japan, and Mexico (Boykoff, 2010). In Pakistan, there is lacking of newspaper coverage on climate change and its effects on different sector. No earlier studies were found on “Climate Change in the Mainstream Pakistani Press: Their Coverage Trends and Framing Portrayals” circumstances. Consequently, it is very essential to conduct this kind of studies to set the trend of newspaper coverage about the significance of climate changes issues.

In Pakistan, generally the issues of environmental changes and natural disasters are disregarded and their urgency are ignored. The mainstream media seems not to be interested in climate issues reporting with proper research and follow up (Muzamill, 2012). The purpose of the study is to identify print media role as a trendsetter, evaluate its framing techniques, and check its reporting frequency in Pakistani mainstream newspapers.

**Rational of the Research Study**

This study is relatively a new and different area for research in Pakistan. Actually, in Pakistan very few researches and educational institutes are working in this field of climate change and most have a quite narrow consideration.

Recently, about issues of climate changes a great consciousness and study preference are equally sent to academics as well as at policy level. It was a best evidence of linkage between development and climate changes (FFC, 2017). A more realization is being initiated among policy makers quite today than before on environment changes anxieties. Now, the climate ministry is more strongly claiming to talk about issues of climate changes (The Nation, 2018). Thus, this talk gives a new name to this Ministry as the Ministry of Environment and Climate Change. Its purpose is to guide government in getting manageable economic development by confirming agriculture and food security, water and energy security (Bashir, 2019). The researcher analyses the content published in newspaper regarding climate changes in Pakistan. It is estimated that this research will 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. Another vital role of this study would be to contribute to
the strengthening of local media networks and improvement of media relations in the region on climate change reporting and coverage. This study will also be helpful for the further researcher about the coverage trend and framing of mainstream press regarding climate change in Pakistan.

**Objectives of the Study**

Pakistan is a developing country and facing different challenges. Climate change issues are not only in Pakistan but also all over the world. Due to climate change, Pakistan is facing floods, over rain, drought and water scarcity, food shortage and many diseases. These are the hurdles in the development and destroy the economy of Pakistan. The basic objectives of the study are following:

1. To examine print media coverage on global warming and its warnings and preventive actions.
2. To study print media coverage on water scarcity in Pakistan.
3. To find out print media coverage on agriculture and food productivity.
4. To know how print media covered stories of climate change in perspective of creating awareness.
5. To evaluate the commonalities and variances between Daily the Nation, Daily The News, Daily Nawa-i-Waqat and Daily Jang coverage in the context of climate change in Pakistan.

**Literature Review**

*Sharif and Medvecky (2018)* in their study explored the three factors which are responsible for low coverage of climate news in media i.e. insecurity, repudiation, and low levels of wakefulness regarding environment changes in Pakistan.

*Nor IjidianaAzmi et al. (2015)* conducted study to know about coverage of media about global climate variation in Malaysia. The study was based on contents analysis and data was collected from four newspapers of Malaysia and data collection time period was from 2008 to 2010. Population of study was news articles about global climate change. The results of study revealed that Malaysian print media give moderate coverage on climate change and have influenced by global events and shows dramatic flow in coverage over significant event associated with climate changes.

*Chinenye Nwabueze et al. (2015)* conducted research study to explore media coverage about issues of climate changes. The core objective of research was to check media coverage about climate change and to explore process in which environment changes related concerns were presented.

*Ewart and McLean (2014)* explored in their study role of two Australian newspapers to find how climate liability was covered. The contents of editorials and articles were studied to find out who was responsible of failure to ignore such significant aspects connected with disaster management were checked. The study concluded that when mass media attentive on inquiring upon who is responsible of failure or ignoring the aspects that may be taken in priority basis to control natural disasters, the results were mixed that it is responsibility of various departments to prepare such aspects that may overcome and avoid upcoming disasters.

*Zahid Yousaf et al., (2013)* conducted study to explore media coverage about climate change in Pakistan. Their investigation focused on environmental reporting in Pakistan. The study was based on qualitative content analysis. For data collection interviews of journalists were conducted. It was found that environmental journalists faced various challenges while reporting environmental issues. It was revealed that environmental reporting is not priority among editorials and newsrooms around the country. It was concluded that country is going over social, political and state of war disorder that not allow much deliberation of climate issues.

*Amu and Agwu (2012)* investigated in their study journalist’s attitude belonging to print media about coverage of climate issues in Nigeria. Study was found that majority of respondents argued that internet is most important source of information due to its efficiency and reliability. Furthermore, study found that
other main source of info regarding environment changes were print media, electronic media, political leaders and ministry of environment. Study also concluded that majority of journalists (73%) did not get expertise regarding the issue coverage of climate change due to absence of attention in reportage of climate changes stories. The study recommended that there is need to conduct trainings in universities to train the students of agriculture and mass media to make them able to highlight climate change issues.

Tairo (2011), in his research study explored that print media is most influential and effective way of awareness as compared to any other form of media such as electronic media, radio and digital media. Print media in Africa has played vital role in informing people regarding environmental change and other related human impacts.

Yadav and Rani (2011), in their study argued that sustainable development can attain by protecting environment by using natural resource in sensible way. Both developed and developing countries have equal rights in stewardship of globe. The survival of earth depends upon it.

Shanahan (2011) in his research study stated that media is important source to educate people regarding climate change. It has powerful ability to inform public about dangerous effects and climate change and illustrate which kind of strategy should be adopted to reduce the amount of earth warming.

Adam Corner (2011) in their study evaluate the basic source of getting info about climate changes in Eastern Africa. The study was conducted in Uganda and study revealed that there are various sources of information like newspapers, television channels and lot of FM radio stations that are providing information to public. The basic aim of study was to find out how these different mediums reported climate change issue.

Sundblad (2008) stated that media is not doing as well and enough in analyzing climate change issues that cause disasters. Media shows interest in politics and highlighting news related to political parties and government and they don’t seek scientists. He argued that strong knowledge contributes important role and influence journalists to report climate change issues with accuracy that may help people to understand and develop such strategies that may help in minimum-zing consequences of global climate change.

Boykoff (2007) conducted research study to investigate climate change issue coverage in news articles in leading British and Japanese newspapers from 2003 to 2006. He found that print media gave satisfactory coverage to climate change issue during the selected period in both countries. Various programs about climate change i.e Kyoto protocol in February 2005 and Cool Biz campaign was given more coverage by mass media in UK and Japan.

Antilla (2005) conducted research study to check print media coverage about climate changes. Study was content analysis based and data was collected from 255 different sources from 2003 to 2004.

Bord et al. (2000) stated that media coverage plays a vital role in making public opinion about climate changes and multi coloured politicized environment where people may be stimulated into action and resigned to passivity.

Present Study

The present study was conceptualized about the climate change in the mainstream Pakistani press: coverage and framing trends. The study was conducted under the framing theory. Under the notion of "Framing", the researcher intends to explore the nature of framing of Pakistani mainstream press on issue of climate changes into three ways suggestive, critic, & appreciative. The study was based on both quantitative and qualitative nature and was hypothesized that print media gave sufficient space to climate issues (H1) and Pakistani mainstream press framing portrayal is more suggestive toward government policies on issue of climate change (H2).
Research Method

Current research study was basically qualitative and quantitative in nature. Content analysis technique used to evaluate the content of editorials and articles. "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. Quality of content was checked through editorials words and their framing analysis either it suggestive, critic or appreciative. For content analysis on “Climate change in the mainstream Pakistani press: coverage and framing trends 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.

Measurements

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 editorials published in selected newspapers which were related to research issues i.e. global warming, climate change and water scarcity and agriculture and food security from 1st January 2011 to 31 December 2018. Editorials considered unit of analysis in which words, sentences or whole paragraphs were about research issues. Population of study was editorials and 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, food security, weather changes, temperature increase, and disease through climate change.

Quantitative Measure

Quantitative measurement can be measured in figure and digit. Quantitative measurement of editorial was done under three research issues namely (1) Climate change’s & global warming (2) Climate change and water scarcity and needs (3) Climate changes and agriculture & food security” with related to climate change 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 editorials was done under three research issues namely (1) Climate change & global warming (2) Climate change and water scarcity (3) Climate changes and agriculture & food security” and slant was measured as three categories, suggestive, critic, or appreciative.

Issues Studied and Examined in Research

1. Climate change & global warming
2. Climate change and water scarcity
3. Climate changes and agriculture & food security

Measurement of the Framing/ Coding Sheet

To analyse the data, the researchers designed coding sheet. Every editorials slant was measured as three categories, suggestive, critic, or appreciative on the bases of the frame given by mainstream press on these selected 3 research issues namely, Climate change & global warming, Climate change and water scarcity and Climate changes and agriculture & food security.
Suggestive Portrayal
An editorial is considered suggestive if the frame was found as;

i. If these selective newspapers positively highlight the upcoming climate changes and create awareness to the general masses.

Critic Portrayal
An editorial is considered critic if the frame was found:

i. If these selective newspapers framing stance toward the issue in this way, that government is not showing serious attitude and its approaches are not good enough for tackling climate changes.

Appreciative Portrayal
An editorial falls into the category of appreciative if the frame was found as:

i. If these selective newspapers admit, that government is moving towards positive development about these climate changes issues according to international standards and criteria.

Results
Climate change & Global Warming,
Climate change and water Scarcity & Need of Dams in Pakistan,
Agriculture & Food Security,

Table 1. Editorial Treatment of Daily the Nation on the all under research issues of Climate change & Global Warming, Water Scarcity in Pakistan, Agriculture & Food Security.

| Issues                                | Total Editorials | Suggestive | Critic | Appreciative |
|---------------------------------------|------------------|------------|--------|--------------|
| Climate change & global warming its Warnings and Preventive actions | 25 (29%) | 12 (48%) | 8 (32%) | 5 (20%) |
| Climate change and Water Scarcity     | 54 (63%) | 30 (56%) | 19 (35%) | 5 (9%) |
| Climate change and Agriculture & Food Security | 7 (8%) | 4 (57%) | 1 (14%) | 2 (29%) |
| Grand Total                           | 86 (100%) | 46 (53%) | 28 (33%) | 12 (14%) |

The above table shows the total editorial treatment of Daily the Nation from 2011 to 2018 on all issues Climate change & Global Warming, Water Scarcity, Agriculture & Food Security. According to results, during the period of 8 years, Daily the Nation published total 86(100%) editorials about concerned issues in which 46 (53%) editorials frame were suggestive, 28(33%) editorials were against Pakistani policies and fall in a critic frame and only 12(14%) editorials were written as appreciative. The result shows that during period of 8 years research from 2011 to 2108, Daily the Nation most of editorials are as suggestive frame toward the solution of issues.

Table 2. Editorial Treatment of Daily the News on the all under research issues of Climate change & Global Warming, Water Scarcity in Pakistan, Agriculture & Food Security.

| Issues                                | Total Editorials | Suggestive | Critic | Appreciative |
|---------------------------------------|------------------|------------|--------|--------------|
| Climate change & global warming its Warnings and Preventive actions | 21 (38%) | 16 (76%) | 5 (24%) | 0 (0%) |
Climate changes and Water Scarcity
(55%) (61%) (32%) (7%)
Climate change and Agriculture &
Food security
(7%) (50%) (50%) (0%)
Grand Total
(100%) (66%) (30%) (4%)

Note: The above table shows the total editorial treatment of Daily the News from 2011 to 2018 on all issues Climate change & Global Warming, Water Scarcity & Need of Dams in Pakistan, Agriculture & Food Sector. According to result, during the period of 8 years, Daily the News published total 56(100%) editorials about concerned issues in which 37(66%) editorials are falls of suggestive category, 17(30%) editorials are against Pakistani policies and framed as critic portrayal and only 2(4%) editorials written as appreciative approach. It indicates that during period of 8 years research from 2011 to 2108, Daily the News most of editorials are as suggestive toward the solution of issues.

Table 3. Editorial Treatment of Daily Nawa-i-Waqt on the all under research issues of Climate change & Global Warming, Water Scarcity in Pakistan, Agriculture & Food Security.

| Issues | Total Editorials | Suggestive | Critic | Appreciative |
|--------|-----------------|------------|--------|--------------|
| Climate changes & global warming its Warnings and Preventive actions | 18 | 11 | 6 | 1 |
| (13%) (61%) (33%) (6%) | Climate change and Water Scarcity | 117 | 67 | 50 | 0 |
| (81%) (57%) (43%) (0%) | Climate change and Agriculture & Food security | 9 | 4 | 5 | 0 |
| (6%) (44%) (56%) (0%) | Grand Total | 144 | 82 | 61 | 1 |
| (100%) (57%) (42%) (1%) |

The above table shows the total editorial treatment of Nawa-i-Waqt from 2011 to 2018 on all issues Climate change & Global Warming, Water Scarcity in Pakistan, Agriculture & Food Security. According to result, during the period of 8 years, Daily Nawa-i-Waqt published total 144(100%) editorials about concerned issues in which 82 (57%) editorials were suggestive stance, 61(42%) editorials were against Pakistani policies toward the issue and treated as critic and only 1(1%) editorial were framed as appreciative. It indicates that during period of 8 years of research from 2011 to 2108, Daily Nawa-i-Waqt most of editorials were written with suggestive approach toward the solution of issues.

Table 4. Editorial Treatment of Daily Jang on the all under research issues of Climate change & Global Warming, Water Scarcity in Pakistan, Agriculture and food security

| Issues | Total Editorials | Suggestive | Critic | Appreciative |
|--------|-----------------|------------|--------|--------------|
| Climate changes & global warming its Warnings and Preventive actions | 21 | 17 | 2 | 2 |
| (37%) (80%) (10%) (10%) | Climate changes effect on Water Scarcity | 28 | 19 | 8 | 1 |
| (49%) (67%) (29%) (4%) | Climate change and Agriculture & Food security | 8 | 3 | 5 | 0 |
| (14%) (38%) (62%) (0%) | Grand Total | 57 | 39 | 15 | 3 |
| (100%) (69%) (26%) (5%) |
The above table shows the total editorial treatment of Daily Jang from 2011 to 2018 on all issues i.e. Climate change & Global Warming, Water Scarcity in Pakistan, Agriculture & Food Sector. According to result, during the period of 8 years, Daily Jang published total 57(100%) editorials about concerned issues in which 39(69%) editorial favoured the stance of suggestive, 42(26%) editorials were against Pakistani policies and treated as critic and only 3(5%) editorial were written as appreciative. It indicates that during period of 8 years from 2011 to 2108, daily Jang most of editorial written as suggestive toward the solution of issues.

Table 5. Comparison of Editorial Treatment of The Nation, The News Nawa-i-Waqt and Jang on the issue of Climate change in Pakistan

| Newspaper   | Total Editorials | Suggestive | Critic | Appreciative |
|-------------|------------------|------------|--------|--------------|
|             | No's. | %    | No's. | %    | No's. | %    |
| The Nation  | 86    | 53%  | 28    | 33%  | 12    | 14%  |
| The News    | 56    | 66%  | 17    | 30%  | 2     | 4%   |
| Nawa-i-Waqt | 144   | 57%  | 61    | 42%  | 1     | 1%   |
| Jang        | 57    | 69%  | 15    | 26%  | 3     | 5%   |
| Total       | 343   | 60%  | 121   | 35%  | 18    | 5%   |

The above frequency distribution table shows comparative editorial treatment of all four newspapers (The Nation, The News, Nawa-i-Waqt and Jang) on the issue of climate changes in Pakistan during the 1st January 2011 to 31st December 2018. This comparative analysis shows that all four newspapers (The Nation, The News, Nawa-i-Waqt and Jang) publish editorials, 86(100%), 56(100%), 144(100%) & 57(100%) respectively. The result indicates that Daily Nawa-i-Waqt published more editorial as compare to Daily the Nation, Daily the News, & Daily Jang during the selected period of 8 years. According to the results, Nawa-i-Waqt 82(57%) editorials written as suggestive framing for the tackling the issue of climate change. It shows that Nawa-i-Waqt gave a more coverage and written more editorial suggestively as compare to other three newspapers. While Nawa-i-Waqt publish 61(42%) editorials written with the slant of critic on poor planning and mismanagement of Pakistani government about the environment changes in Pakistan. The analysis illustrates that Daily Nawa-i-Waqt published more editorial with the critical stance as compared to the rest of other three newspapers; Daily the Nation, Daily the News and Daily Jang. The result shows that all four selected newspapers written total 343(100%) editorials on the issue of climate changes in Pakistan in which 204(60%) written as suggestive, while 121(35%) editorials frame were based on critic toward Pakistani poor management about issues and 18(5%) written as appreciative framing. Hence, overall editorials treatment of all four newspapers on all three issue issues of climate change; its framing trends remain as suggestive and play a vital role to overcome the issues.

Discussions & Conclusion

The current research study presented content analysis to analyze climate change in the mainstream Pakistani press: its coverage and framing trends. The study found considerable amount of information about climate change in Pakistani print media. It is concluded that all four selected newspapers published total 343 editorials on climate changes in a Pakistan from 1st January 2011 to December 2018. The result found that from all four newspapers editorials framing, 60% were suggestive stance, 35% editorials were critics frame and only 5% editorial were appreciative. So, it was accomplished that mainstream Pakistani press coverage was more suggestive towards climate change issues. Overall, the study found that the mainstream Pakistani press Nawa-i-Waqt gave more coverage to the climate change and framing was very suggestive and positive toward the solution of issue. Hence both hypotheses became true. The findings to some extent, supported this phenomena, coverage and framing climate changes in mainstream Pakistani English and Urdu press was in accordance with their newspaper policies. It was also found that selected newspapers coverage and
framing were criticize towards government, legislators and environment enforcement agencies for their poor performance for tackling climate changes in Pakistan. To accomplish, the findings of this study revealed suggestive trends and positive role of newspaper to cover the issue of climate changes in Pakistan. Thus, it is recommended that the mainstream Pakistani press must emphasize particular themes; such as, the reasons of climate change. Consequently, a complete and inclusive data is conveyed to create awareness among public to enhance their information and require deed about issues of climate changes in Pakistan.
Climate Change in the Mainstream Pakistani Press: Coverage and Framing Trends

Reference

Adam, C. (2011). *Hidden Heat Communicating climate change in Uganda: Challenges and Opportunities*. Kampala Uganda: Panos Eastern Africa

Amu, C. J., & Agwu, A. E. (2012). Attitude and knowledge of print media journalists towards reporting of climate change news in Nigeria. *Journal of Agricultural Extension, 16*(2), 52-67

Antilla, L. (2005). "Climate of scepticism: U.S. newspaper coverage of the science of climate change. *Global Environmental Change, Part A: Human and Policy Dimensions, 15*(4): 338-352.

Bord, R. J., O’Connor, R.E., Fisher, A. (2000). In what sense does the public need to understand global climate change? *Public Understanding of Science*, 9:205–218.

Boykoff, M. (2010). Indian Media Representations of Climate Change in a Threatened Journalistic Ecosystem. *Climatic Change, 99*.

Boykoff, M., (2007). Flogging a dead norm? Media coverage of anthropogenic climate change in United States and United Kingdom from 2003 to 2006. *Area 39*:470–481.

Chinenye, N., Frank, N., Dubem, U., & Emmanuel O. (2015). Nigerian Newspapers Coverage of Climate Change Issues. *European Scientific Journal, vol.11*(17)

Choudhry, Q. Z. (2016). National Climate Change Policy. Pakistan’s Increasing Vulnerability to Climate Change: Policy Response. [http://en.wikipedia.org/wiki/climate_change](http://en.wikipedia.org/wiki/climate_change)

Daud, M. K., Nafees, M., Ali, S., Rizwan, M., Bajwa, R. A., Shakoor, M. B.,… & Malook, I. (2017). Drinking water quality status and contamination in Pakistan. *BioMed research international, 2017*.

Dietz, T., Frey, R.S., & Rosa, E. A. (2002). Risk, Technology, and Society. In Dunlap & Michelson (Eds.). *Handbook of Environmental Sociology (pp. 329-370)*. Westport, CT: Greenwood Press.

Ewart, J., & McLean, H. (2014). Ducking for cover in the blame game: News framing of the findings of two reports into the 2010-11 Queensland floods. *Disasters, 39*(1):166-184.

Farouqi, B. A., Khan, A. H., & Mir, H., 2005. Climate Change Perspective in Pakistan. *Pakistan Journal of Meteorology, 2*(3)

Federal Flood Commission, (2107). Federal Flood Commission objectives. Retrieved from [https://mowr.gov.pk/wp-content/uploads/2018/06/Annual-Flood-Report-of-FFC-2017.pdf](https://mowr.gov.pk/wp-content/uploads/2018/06/Annual-Flood-Report-of-FFC-2017.pdf)

Ford, N. B. (1991). Journalists as bureaucrats: perceptions of social responsibility media roles in local emergency planning. *International Journal of Mass Emergencies and Disasters, 9*(1):75-87.

Ghani, A., & Muhammad A. (2017). *Climate Change Implications for Food Security; Pakistan Perspective. Agri Res & Tech: Open Access J.* 2017; 7(4): 555716. DOI: 10.19080/ARTOAJ.2017.07.555716.

Ghani, M. (2013). *The coming wars*. The News 14/02/2013, Pakistan.

Global Climate Risk Index (2017). *Who Suffers Most from Extreme Weather Events?* Weather-related Loss Events in 2015 and 1996 to 2015. Retrieved from [http://germanwatch.org](http://germanwatch.org).

Intergovernmental Panel on Climate Change. (2007). *Climate Change 2007: The physical science basis*. Contribution of Work Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate. United Kingdom: Cambridge University Press.

Kaiser, H. M., and Drennen, T. (1993). *Agricultural dimensions of global climate change*. St. Lucie, FL: St. Lucie Press.

Kakade, O., Hiremath, S., and Raut, N. (2013). Role of Media in Creating Awareness about Climate Change- A Case Study of Bijapur City. *IOSR Journal of Humanities and Social Science (IOSR-JHSS), 10*(1):37-43

Kheeshadeh, M. (2012). Effects of globalization on Tv and print media in Pakistan. *International Journal of Asian Social Science, 2*(9):1441-1456.

Kirby M., Mainuddin, M., Khaliq, T., Cheema, M and Tasneem, K. (2017) Agricultural production, water use and food availability in Pakistan: Historical trends, and projections to 2050. Agricultural Water Management, 179: 34-46

Lewis, J., & Boyce, T. (eds.) (2009). *Climate Change and the Media*. New York: Peter Lang Publishing Inc.
Malik, M.R. (2017). Daunting environmental challenges. The Nation November 08, 2017.

Muzamill, A. (2012). A Comparative Study of Natural Disasters News Coverage in Pakistan by Dawn & the News (The Case of Earthquake 2005, & Floods 2010). International Conference on Communication, Media, Technology and Design, 1-5. Istanbul: ICCMTD.

Naeem, W. (2013). Disaster Reporting: 'Not Only Reporters but Also Editors Need Sensitization Training' - The Express Tribune. N. 20 Oct. 2013.

Naseer, E. (2013). Pakistan’s Water Crisis. Spearhead Research Special Report. DECEMBER 2013 PART – I.

Nor, J. A., Nor, O., Safawati, Z., Zanirah, W and Akmah, Y. (2015), Media Portrayal on Global Climate Change: an Analysis of Malaysian Mainstream Newspapers. Studies in Media and Communication, 3(1)

Rybalko, S. (2011). Russian disaster coverage is no accident: How two Russian newspapers and their readers frame a Russian plane crash. Russian Journal of Communication, 4(1-2):53-71.

Schmidtta, A., Ana, A and Mike, S. S. (2013). Media Attention for Climate Change around the World: A Comparative Analysis of Newspaper Coverage in 27 Countries. Global Environmental Change. DOI: 10.1016/j.gloenvcha.2013.07.020.

Shabir, G., Wajid, A. K., Adnan, M and Safdar, G. (2014). A Comparative Analysis of the Editorials of ‘The Nation and ‘The News: The Case Study of Pak-India Relations Issues (2008-2010). Journal of Political Studies, 21(1): 41-59.

Shakoor, A. (2011), Impact of Climate Change on Agriculture: Empirical Evidence From Arid Region.Pak. J. Agri. Sci., 48(4):327-333.

Shanahan, M. (2011). Why the media matters in a warming world: A guide for policymakers in the global South. Climate Change Media Partnership. IIED. www.climatemediapartnership.org

Sharif, A. & Medvecky, F. (2018). Climate change news reporting in Pakistan: a qualitative analysis of environmental journalists and the barriers they face. JCOM 17 (01), A03. https://doi.org/10.22323/2.17010203.

Sonwalkar, P. (2002). ‘Murdochization’ of the Indian press: from by-line to bottom line. Media Cult Soc 24:821–834.

Sunblad, E.L. (2008). People’s knowledge about climate change: Uncertainty as a guide to future commitments. Gothenburg: Department of Psychology.

Tagbo, E. (2010). Media Coverage of Climate Change in Africa A Case Study of Nigeria and South Africa. Reuters Institute Fellowship Paper University of Oxford.

Tairo, A. (2011). Print Media Awareness Campaign on Impacts of Climate Change in Africa. E Turbo News Representative, Tanzania. Retrieved on:30 March 2016.

World Bank, (2018). CO2 emissions (kt): Pakistan. Retrieved from https://data.worldbank.org/indicator/EN.ATM.CO2E.KT?locations=PK.

Yadav, P.Y., & Rani, J.R. (2011), Role of Communication in Climate Change and Sustainable Development. Global Media Journal – Indian Edition, 2(2).

Zahid., Zil-e-Huma and Ehtisham, A. (2013). Reporting of Environmental Issues in Pakistani Press. World Applied Sciences Journal, 28(6): 829-834.