Role of Media in Promoting Environment Protection during Smog Crisis in Lahore

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Abstract

Climate change has become the most alarming threat to all forms of life on earth. As a result of it, changing weather patterns like heat waves, storms, drought, and rising oceans are witnessed in Pakistan as well. Lahore is among the cities that are highly affected by smog with the highest air quality index (AQI) that is considered not only UNHEALTHY but harmful as decreasing the average age of residents of the city. This situation calls all relevant sections of society including mass media to play their needful role as media is an agent of social change. Awareness is a key towards solution. This study attempts to explore the role of newspapers in creating awareness about smog in 2016 and 2017. Main objective of this study is to examine the policy of newspapers with regards to covering issues related to environment and applying solution based journalistic techniques on environment protection. Using Framing theory as a theoretical foundation, Quantitative content analysis of editorials of two widely circulated national dailies of Pakistan, Dawn and The News are conducted. Findings show that environmental issues are not given sufficient coverage in selected newspapers. Although newspapers tried to maintain the balance of using generic and issue specific framing schemes while writing on environment issues, smog has been covered with issue specific frame only. The smog issue has been marginalized and is discussed only during crises. Editorials, although apply solution-based journalism. The Pakistan Climate Change Act 2017 is not played up in editorials. No significant difference in coverage of environmental issues in the selected newspapers was found with regards to policy. The study recommends a robust communication awareness plan be devised on a regular basis rather than highlighting issue during crisis.

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Keywords: *Smog, Environment protection, Solution Journalism, Framing, Awareness, Editorials, Climate change. Sustainability*

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INTRODUCTION

Environment protection and sustainability are the burning issues in today's modern industrial and technologically advanced global world. Human beings are contributing more towards global warming than protecting the earth. Under the cover of development, modernization, and industrialization the result came out to be named as 'threat to mother-planet'. The global climate is changing drastically which has led world leaders to deliberate for generations to come. Keeping in view of the significant environmental risks, governments and international agencies like United Nations are working on policies for environment protection. That's why environmental sustainability is one of the major Sustainable Development Goals to be achieved by 2030. The role of media in attaining developmental goals can't be neglected because of its established significance and power in any democratic society. Media as the fourth pillar of state is expected to serve 'environmental interests' in public welfare especially for it widely enjoyed 'watchdog role'.

Environment Challenges in Pakistan

Being the fifth most populous country Pakistan is home to 241.5 million people as per census 2023. Like other developing countries, Pakistan is facing many environmental challenges that are exacerbating the health and economic situation due to environmental problems. Populations in South Asian region are still suffering from poor air quality to hazardous level. Although Pakistan is not a major contributor of carbon emissions as it only contributes to 0.47 % in greenhouse gasses, but this figure even then should not defocus from global alarming situation. The issue of pollution is constantly very high and alarming. According to the report of Global Environmental Performance Index (EPI) rankings issued on World Economic Forum meeting states that Pakistan stands at 142 in EPI among 180 countries on 24 performance indicators across 10 issue categories covering environmental health and ecosystem vitality. So, the situation in Pakistan is quite worrisome because it ranks amongst the top 10 countries most affected by climate change during the last twenty years. The evidence of this extreme environmental crisis is being witnessed since 2016 consecutively in the form of smog till to date. Smog is a type of air pollution that is formed when smoke and fog combine. Smog causes numerous problems for human beings in terms of health hazards and various environmental issues impacting on economy development and culture. Since 1952 when great smog was seen in London, studies have been conducted to find out the effects of smog on health. Smog is so poisonous to kill humans; Logan (1953) reported that 4000 persons died in 1952 smog crisis. This calls the serious attention from all stakeholders especially individual members of society to understand the sensitivity and urgency of smog issue.

The residents of Lahore Punjab, Pakistan suffered from severe health conditions owing to smog crisis during 2016 and 2017 when first time smog engulfed the city. Mukhtar (2017) reported that in Pakistan, due to the PM2.5 exposure, death toll increased from 82,300 in year 1990 to 135,100 in year 2015. Moreover, chronic obstructive pulmonary diseases have also increased from 1,600 in 1990 to 5,000 in the year 2015.The measurement scale for air pollution is in ambient fine particulate

matter PM 2.5. According to WHO, the safe level of PM2.5 concentration in air is10 µg/m3. However, Lahore has 68 µg/m3 of PM2.5 particles in air, which is 6.8 times higher than the safe level provided by the World Health Organization. According to the World Bank report, Pakistan is facing 3.86 billion economic losses annually due to climate change.

The Smog in the years 2016-17 extremely disrupted life. The schools' timings in Punjab were changed for around 15 days, main highways were closed due to low visibility, flights were canceled, and hospitals were filled with patients. To mention, this is not the first time that smog engulfed Lahore, but it is for the fifth year, calling for execution of stringent environment protection steps for awareness and prevention of killing smog.

The sources of air pollutant emissions in Punjab are large-scale industrial facilities — cement, fertilizer, sugar, and power plants — many of which use furnace oil high in sulfur content, and burning of agricultural residues, sugarcane fields, and municipal waste. A wide range of small-scale to medium-scale industries, including brick kilns and steel rerolling contribute substantially to urban air pollution through their use of "waste" fuels, including old tires, paper, wood, and textile waste. Air quality is further exacerbated by the widespread use of small diesel electric generators in commercial and residential areas in response to the electricity outages. Poor maintenance of boilers is another contributor to air pollution. Vehicular emissions and lack of proper disposal of waste collected are also major sources of fine particulate matter in the province. Water and sanitary issues across the country are other challenges Pakistan is facing.

Socioeconomic & Political aspects of environmental challenges

Today, in Pakistan, masses are getting better facilities than past in many ways but also paying heavy cost of these facilities in form of various environmental issues that are surfacing due to improper planning and execution. To name a few examples, the number of vehicles is increasing day by day as more banks offer loans and leases. Moreover, online taxi services in the city bring more vehicles on road as part of business which proliferate pollution. Massive level construction work and excavations are also adding to environmental challenges. The government is focusing more on infrastructure and transportation development in the heart of country Lahore which causes disruption in traffic flow and air pollution. The power crisis in Pakistan is also said to be a political matter that created need of diesel electric generators for domestic and commercial use. This has been caused by petrol thus adding environmental issues.

Legislation

The government of Pakistan passed "Pakistan Climate Change Act" on March 17, 2017, to tackle climate change and environmental issues. The Punjab government passed Punjab Environmental Protection Act in 1997 that was amended later in 2012 and, Smog policy 2017 was adopted to curb the menace of smog. Although, federal and provincial governments including Punjab province achieved milestones

by legislating and making policies for environment protection, but proper and systematic implementation and monitoring of these laws are still awaited.

Media is a key player in disseminating information and setting agenda in any society. Environmental issues including smog are becoming more acute day by day. Consequently, it is needed to find the role of media in cooperating with governments, creating awareness on environment protection, promoting environmentally friendly behaviors and encouraging engaging public participation. If media doesn't play its role of watchdog and revise its agenda in public welfare, the day is not far when irreparable losses of life, property, and natural resources will become fate of Pakistan. Pakistan is already facing alarming environmental crisis among other nations as it is ranked seventh most vulnerable country to climate change that contributes less than one percent to climate altering global emissions on number seven among most dangerous countries of the world. This study paves way for policy makers in government and media to detect gaps in communication and creating awareness on environment protection and accordingly plan long term communication strategies for saving environment and Pakistan from further losses and disasters. As proposed in the research conducted by Niaz, Jiti, & Zhang (2015) integrated multi- pollutant control strategy for lessening air pollution in Pakistan should be adopted.

Solution Journalism

Solution journalism is relatively a newly adopted approach in the field of Journalism that is also referred to 'constrictive journalism' or 'problem solving journalism'. McIntyre (2017) defines solution journalism that "examines credible responses to social problems to learn how and why potential solutions work or do not work (p.2)". It's about reporting positive aspects of a news story (conflict) that makes reporter an active reporter who is concerned with the public responses after story is published. Borup (2014) as cited in McIntyre (2017) posits that it's the responsibility of journalists not to reveal problems but also provide with solutions (p.5). Such reporting increases the readership and sharing of the news as well for the reason 'negative news' is fading out to attract more readership (Noack, Orth, Owen, & Rennick, 2013).In addition to it, this solution journalism is effective and helps in engaging audience for taking (collective) action(K. E. McIntyre, 2015).

LITERATURE REVIEW

Due to the multidimensionality and severity, smog as a cause of climate change has gained attention of scholars in many disciplines /fields that includes from both pure and social sciences. Studies have highlighted the effects of Smog on physical health of people. Smog and higher level of P.M 2.5 in air have caused respiratory chronic issues, high level of cardiovascular attacks, lungs cancer and higher risks in children of all ages (Beeson, Abbey, & Knutsen, 1998; Hu & Jiang, 2013; Ihedike, Mooney, & Price, 2018; Philip J Landrigan, Carole A Kimmel, Adolfo Correa, & Brenda Eskenazi, 2004; Philip J. Landrigan, Carole A. Kimmel, Adolfo Correa, & Brenda Eskenazi, 2004; Mishra, 2017). Others adopting solution-based approach have proposed ways to combat the threats caused by the prime environmental issue. (Wu et al., 2011)

Yousaf Ali et al (2019) also proposed a fuzzy VIKOR method for the reduction of Smog. Based on findings of the case study conducted in Pakistan their study explored the effects of Smog in environmental, social, and economic context.

Awareness and climate literacy are potential instruments of attitudinal and behavioral change of people. They have the ability to accelerate the role of general public by educating them about the worst effects of climate change. Climate literacy thus enhances the understanding of the public in this regard. (Shwom et al. 2017). Resolving environmental problems is a long journey and the fundamental and crucial step in this journey is to develop critical thinking among people. (O'brien et al. (2018). The researchers also believed climate literacy at the heart of resolving climate change problems.

An integral part of the international response to climate change is awareness and literacy. It promotes changes in people's attitudes and behaviors, raises "climate literacy" among youth, and aids in the understanding and mitigation of the effects of global warming. (UNESCO, 2014)

Media as an agent of social change is thus expected to play a vital role in creating awareness and enhancing climate literacy of people (Jan at el.,2020) in their study summarize the reasons of low climate literacy and awareness. Their work also attempted to outline the role which agents of social change like educational institutes and media can play for enhancing climate literacy and awareness of climate change among people. Findings of a study regarding the role of media in educating people about climate change and consequential issues by Loy et al. (2020) also identified media as a main source of education on climate change.

Considering its influence, the media may actively contribute to raising public awareness of climate change and encouraging decision-makers to do their share of the work. Additionally, this communication method can be utilized to spread pertinent data and items from policy and scientific circles to the public. (Kakade et al., 2013)

Media responsibility extends beyond simply disseminating information. However, it must bring the public's attention to climate-related issues like food, water, energy, and health through its trustworthy and credible content. In turn, the people can exert pressure on the government to act (Riaz, 2018).

Media's role in environment protection has long been debated. Study conducted by Sampei & Aoyagi-Usui (2009) explore that environment related problems rank on number two as are the most serious issue in the world. Studies (Lichter & Rothman, 1999; Mazur & Lee, 1993; McComas, Shanahan, & Butler, 2001; Moore, 2001; Parisi, 1997; Salomone, Greenberg, Sandman, & Sachsman, 1990) urge media to properly give attention to environmental issues and also emphasizing public participation and encouraging civic journalism. It has been argued that media should encourage environmental protection behaviors and attitudes of society by providing proper information. Szigethy (2007) rightly contends that "in order to protect and utilize the earth, air, water and all natural treasures competently,

science needs more and more allies as It has enough rivals, the greatest of which is (accidental or deliberate) disinformation" (p.08).

In addition to it, media by placing environmental issues on its top agenda can develop public support in favor of environmental issues(Atwater, Salwen, & Anderson, 1985; Mercado, 2012). Scholars Skanavis & Sakellari(2008) puts in that media can influence public perception, actions and enhance their participation in a strong way through dissemination of information incorporating various voices on environment education but for this purpose environment related education of journalists is necessary. Mercado (2012)argues that the more coverage to environmental issues is given the better understanding will be creating more awareness.

Environmental hazards including smog are not a new phenomenon as it's continually hitting Pakistan. Keeping in view the sensitivity of global climate changes and environment protection issues, the role of Pakistani media in creating awareness on environment related issues must be investigated. Thus, statement of problem for current research is that have national newspapers played their role in creating awareness on environment protection issues on regular basis or the content was produced only during smog crisis. Also, whether/how solution based journalistic techniques have been applied in newspapers while writing on environment related issues.

Objectives

Keeping in view the statement of the problem, following are the objectives of study.
- To examine the policy of selected newspapers with regards to covering issues related to environment and sustainability.
- To find how newspapers raise awareness and promote environmental protection activities.
- To investigate the major national dailies applying solution based journalistic techniques on environment protection especially on smog.
- To compare both national English elite newspapers' coverage on environmental issues.

Research Questions

- To what extent environment related issues have been highlighted in national English newspapers in Pakistan?
- How the salience has been exerted in their coverage of environmental issues specifically smog?

Theoretical framework

 Framing theory of media has been applied as theoretical background of current study. It specifies processes as how any issue is given salience by attaching attributions to an issue. This process of framing, as D'Angelo & Kuypers (2010) contends whether conscious or unconscious, depicts policy of the organization and thus by doing so 'intended message' is highlighted, emphasized and helps

audience in building the favorable stance over an issue (p 300). McQuail (2010) and Goffman (1974) find framing in journalistic routines such as "stories are given meanings by reference to some particular 'news value' that connects one event with other similar ones"(p.380). The outcome of framing is activation of audience interpretative schemas in understanding the news story as noted down by Scheufele (1999) organizing an idea or theme (p.275). Frames, by organizing patterns and giving salience to news, define problems for audience (Entman, 1993) . Television news framing, as put in by Iyengar (1994), are "episodic" (issue oriented) or "thematic" frames (generic issues in broader view (p.14). Issue oriented news frames are studied in depth with detail while generic frames deals with broader aspects of various events occurred over time and in different contexts or cultures (H. De Vreese, 2001). Scholars (Cappella & Jamieson, 1996) found another form of game framing style that is called "strategically designed news framing" focusing on winning and losing the actors being presented on TV (p.81). The frames have been used to serve diagnostic(defining& causes of problem), (prognostic ascertaining solutions) and motivational (urging for collective action) functions in text(Benford & Snow, 2000; D'Angelo & Kuypers, 2010; Snow, Vliegenthart, & Corrigall-Brown, 2007).

METHODOLOGY

To find out how elite papers have constructed environment issues specially smog issue, quantitative content analysis of all the editorials of two widely circulated major national dailies of Pakistan: Dawn, and The News from September 2016 to 31st December 2017 are examined. All the editorials that appeared in selected newspapers within the time frame have been taken as unit of analysis for this research. A total number of 41 editorials appeared in both the newspapers that are examined.

Following are the eight broad categories have been formed for CA analysis:
- Environment related issues
- Environment Frames
- Risk frame.
- Government performance
- Laws about Environment Protection
- International Perspective
- Scientific perspective
- Framing schemas

Operationalization of Categories

Environment Related Issues: The article is read to find out which of the topics an editorial is under discussion. Following are the major topics related to environment have been categorized along with their scores: Smog=1,Pollution=2, Waste Management=3 Climate Change=4 Deforestation=5 and others =6.

Environment Frames: Frames are referred as performing three basic functions as discussed by Snow, et al. (2007) as Diagnostic, Prognostic and Motivational

frames . Following environment frames are coded as Yes=1 and No= Zero.

Diagnostic: It discusses the causes and reasons of smog and environment problem being discussed. It diagnoses WHY the problem surfaced.

Prognostic: This describes solutions of the smog and environment issues and sharing preventing measures. This also includes applying solution based journalistic techniques that are to "bring "positive elements in a story" by highlighting solutions which increase readership of news story. This is the How-to problem that can be solved and can be avoided.

Motivational: Content that urges the reader to act, motivate and sharing the benefits or damage. This is the NOW to act.

Current research employs only diagnostic and prognostic frames with regards to environmental issues.

Laws about Environmental Protection: Any unit of analyses discussing national or international Laws of environment and Pakistan Environment Change Act 2017 is scored one while absence of this information is termed as zero.

Government Response: Three subcategories are formed that are: Non-Serious Approach: The government is not seriously taking the environment issue, actions are reactive not pro-active and critique on government's performance fall under non-serious approach. Serious approach: Government is concerned, working actively, making pre-arrangements of smog surfaces and creates awareness, government actions for environment protection are discussed, No discussion: an article is not discussing the role of government in either ways. Discussion on government regarding environment is missing.

International Perspective: The piece of writing strongly making link of smog and environmental issue with global environmental concern by highlighting the need, causes and effects of climate change is categories as "Yes=1", when global impact and urge is discussed and "NO discussion" =0 when text doesn't have any discussion about international perspective and discussion is purely contextual.

Risk Frames: Howes(2013)defines Risk as: the hazard and the perception of the hazard. Hazard is "something that has the potential to have a negative impact on the normal functioning of an entity (physical or biological impact) p.5) and uncertain vulnerabilities(Sonnett, 2010).

 It has been operationalized as editorials discussing risk due to environmental issues including financial implications to living beings as individuals, communities or to the economy as a whole. Environmental hazards are linked with health, agriculture, water issues and eco-system that affect, damage or incur loss and threats. All such discourses are counted in risk frame. The presence of such statements is scored one while absence of risk frame is scored zero.

Scientific Perspective: is approaching the issues of environment through scientific perspective and expert's opinion. Scientific research and such details establish authority of claim urges reader for action more effectively. Operationalization of scientific discourse is that Editorials containing scientific information, facts & figures, describing research, and expert's opinion. Therefore, such statements are scored Yes=1, No= Zero.

Framing schemas: Two types of framing schemas: Generic frames and Issue specific frames are examined in unit of analysis. Generic frames generally cover more topics under one general theme thus these are abstract frames. However, Issue specific frames discuss specific issues in detail, their problems, solutions and precautions. (Brüggemann, 2014). Generic frames are operationalized as editorials discussing multiple topics related to environment while issue specific frames are those which contents on single specific issue about reasons of the problem being discussed, solutions and preventive measures and others.

FINDINGS AND DISCUSSION

This part discusses findings of 'object and attribute salience' accentuated by selected newspapers The Dawn and The News.

Examining Object Salience

Total number of editorials appeared in both selected newspapers Dawn and The News are N= 41 in total 15 months studied. It depicts that environmental issues have not been given sufficient coverage to the environmental issues in national papers. Climate change is given more salience by newspapers discussing it 46.3% followed by pollution that includes water, air, and noise pollution making17.1 % and Smog 14.6% impacts on environment.

The chi square test shows that two newspapers are in consonance in terms of extent of coverage (Chi Square=11.583,p=.396) (see table.1). Chi square test depicts that the coverage given to topics by two newspapers is almost similar and there is no statistically difference among the newspapers (Chi Square=8.286, p=.141) (see table.1& Fig.1).

Table1. Object and Attribute Salience accentuated by local newspapers on Environmental issues (N=41)

Variable	Newspapers		Total	Chi-sq.
Dawn N (%)	The News N (%)		N (%)	

No. of Stories	25	16	41	Chi-sq= 11.583, p=.396
Object Salience Topics				
Smog	2 (33.3%)	4 (66.7%)	6 (14.6%)	
Pollution	4 (57.1%)	3 (42.9%)	7 (17.1%)	
Waste Management	3 (12%)	0 (0%)	3 (7.3%)	Ch-sq= 8.286, p= .141
Climate Change	10 (52.6%)	9 (47.4%)	19 (46.3%)	
Deforestation	2 (100%)	0 (0%)	2 (4.9%)	
Others	4 (16%)	0 (0%)	4 (9.8%)	
Attribute Salience				

Diagnostic Frame	yes	22 (59.5%)	15 (40.5%)	37 (90.2%)	Chi-sq= .366, p= .545
	No	3 (75%)	1 (25%)	4 (9.8%)	
Prognostic Frame	yes	21 (61.8%)	13 (38.2%)	34 (82.9%)	Chi-sq= .685, p= .710
	No	4 (57.1%)	3 (42.9%)	7 (17.1%)	
Govt. performance Frame	Not Mentioned	11 (43.9%)	7 (38.9%)	18 (43.9%)	Chi-sq= .002, p= .999
	Non-Serious	11 (43.9%)	7 (38.9%)	18 (43.9%)	
	Serious	3 (12%)	2 (12.5%)	5 (12.2%)	
Environmental Laws Frame	Yes	6 (66.7%)	3 (33.3%)	9 (22%)	Chi-sq= .157, p= .692
	No	19 (59.4%)	13 (40.6%)	32 (78%)	

International perspective frame	Yes	11 (45.8%)	13 (54.2%)	24 (58.5%)	Chi-sq=5.577, P=.018
	No	14 (82.4%)	3 (17.6%)	17 (41.5%)	
Scientific Perspective frame	Yes	13 (44.8%)	16 (55.2%)	29 (70.7%)	Chi-sq=10.858, P=.001
	No	12 (48%)	0 (0%)	12 (29.3%)	
Risk Frame	Yes	25 (62.5%)	15 (37.5%)	40 (97.6%)	Chi-sq=1.602, P=.206
	No	0 (0%)	1 (100%)	1 (2.4%)	
Framing scheme	Generic	11 (52.4%)	10 (47.6%)	21 (51.2%)	Chi-sq=1.336, P=.248
	Issue Specific	14 (70%)	6 (30%)	20 (48.8%)	

The number of editorials appearing in Dawn newspaper are higher than The News from Sep 2016 to December 2017. A higher number of editorials appeared in both the newspapers in the month of November making it 34.1% followed by 9.8% each for January and February. November is the month when Smog starts. June is ranked at number four with regards to publication of environment related editorials because World Environment Day is celebrated in June and hot weather also reminds of climate changes problems.
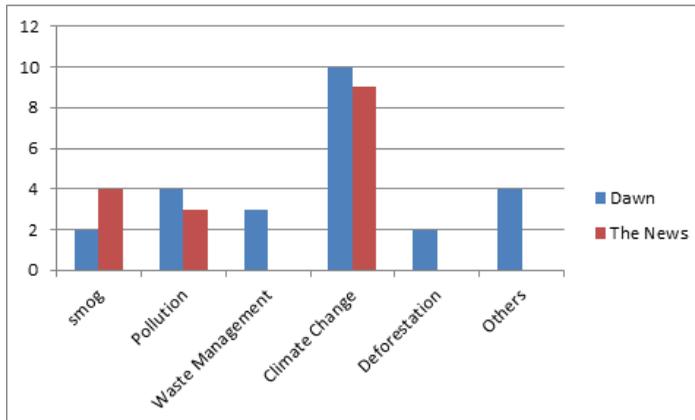
Fig 1: Object Salience by topics by Newspapers

Examining attribute salience

The selected papers have discussed reasons (diagnostic frame 92.1%) and solutions and precautions (prognostic 82.9%) environment related issues. While examining the data it has been observed that environmental issues have been highlighted in the coverage by using different frames and framing techniques. The most accentuated frames are Diagnostic (Dawn=22 counts, The News=15 counts), prognostic frames (Dawn=21 counts, The News=13 counts), Risk frames (Dawn=25 counts, The News=15 counts).

Table 2. Environment Diagnostic frame Themes

Environment Diagnostic Frame				
Global Warming	Govt/Administrative	Knowledge	Social Behavior	Global Effect
Greenhouse gases emission	Trust deficit among govt & masses	Lack of information	Plastic bags usage	US biggest contributor of carbon emissions
Vehicles carbon emissions	Misplaced priorities	Lack of Scientific information	Heedless consumption of natural resources	Coal Power plants in India

Power plants & coal power plants	Lack of proper laws	Research on Environment missing	Social behaviors not environment friendly	Crops stubble burning in Indian Punjab
Domestic & commercial Generators usage and power shortage across country	Corruption and irregularities			Across border industries carbon emission.
Rising temperatures	Lack of monitoring & implementation of existing policies			
Industrialization &Industrial effluence	Week governance			
Fossil burning	Lack of proper environment related mechanism and system			
Crops burning in fields	Exploiting resources			
Solid Waste	Focus on infrastructure development			

Deforestation

Editorials penned down the following solutions to the environment related issues. So, six themes and further categories are found in pragmatic environment frame here.

Table 3. Environment prognostic frame themes

Environment Prognostic Frame					
Aware- ness& Education	**Collective Action**	**State/govt Responsi- bility**	**Coordina- tion beyond borders**	**Resource Manage- ment**	**Policy & implemen- tation**
Creating awareness, Using state TV	Creating greener urban spaces	Clean & re- newable en- ergy genera- tion	India to pay Pak for en- vironment damage due to coal pow- er plants and stable burn- ing	Utiliza- tion of allocated budget	Taking strict administra- tive actions
Issuing en- vironment related alerts	Reducing number of ve- hicles	Eco-friend- ly projects ; prioritizing environment on top	Emphasiz- ing regional talks special- ly with India	Taking UNFCC fund	Coordina- tion among govt dpts.
Media atten- tion should be increased	Self-help for environment protection	Technolog- ical inno- vations in plastic bags usage and auto mobile sector	South Asian regional col- lective ef- forts to pro- tect climate protection	Seek- ing Int. grants for environ- ment pro- tection	Strict mon- itoring system of implemen- tation of laws.

More discussion on environment issues	Forestation on community, local and provincial level	Auto claves		Funding more research on environment	Devising policies and mechanism to check vehicles and industries emitting gases
Educating public and giving them training	Community forest guards	Providing facilities: waste management, installing filters		Experts help should be sought for solving the issues	Forming a proper system for environment protection
Conducting extensive research	Promotion of Public transportation				Policy formation, monitoring and ensuring implementation with feedback of policy effects.
Information sharing on national and international level.	Taking issue seriously				

Nationwide environment movement			

Findings of **risk framing** show that papers have not only discussed diagnostic and prognostic approaches while attributing salience, but they have also highlighted the threats, risks, damages 97.6% to highlight the urgency and importance of environment protection. The pattern of both the newspapers is the same while applying the frame.

Discussing government performance, only 12.2% editorials write that government is serious towards environment issues taking action, either it was while 43.9% criticize government performance as nonseries attitude towards environment protection and on the other hand the same 43.9 percentage goes for the editorials that have not mentioned government role and performance. To find out that how papers are creating awareness on environment protection laws especially Pakistan National Climate Change Act 2017, result of finding show that only 22 % editorials discussed it whereas 78% did not discussed Climate Change Act. So, this frame shows that awareness of environmental laws is somehow missing in the two newspapers. Papers write environmental problems as global issue being faced by the world. In doing so, 58.5% editorials have discussed international perspective, impact, issues linking with international community and need to focus environment protection issues. The only statistical difference found are in International perspective frame where The Dawn out of its 25 stories mentioned the frames 11 times whereas the News mentioned it 13 times out of 16 editorials (Chi square =5.577, p.018).

Scientific perspective has been given salience by putting scientific information on environmental protection issues 70.7% in both the newspapers. However, there is statistically significant difference found in this frame (Chi-sq=10.858, P=.001). The News has used scientific perspective frame in all its 16 editorials while Dawn out of 25 editorials writes scientific perspective 13 times while 12 times this frame is not used. Newspapers tried to maintain balance while writing generic frames of environment 51.2% and issue specific environment frames as 48.8%. There exists a difference in framing schemes in The News as it contributes more 10 generic editorials and six issue specific editorials. However, there is no difference found in two newspapers in applying framing schemes.

DISCUSSION

Overall, newspapers have not given sufficient coverage to issues related to the environment, specifically smog. However, both the selected newspapers write mostly on climate change and global warming followed by pollution, waste management and deforestation. Smog issue has been marginalized as editorials on the topic appeared only during smog season in the month of November. Smog is dealt with issue specific frame and not a single editorial appeared other than smog season. It depicts that smog issue has been marginalized and awareness on the topic

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is not created. Smog, in November, was a burning issue and bad news for public. Scholars (Svensson, Albæk, Van Dalen, & De Vreese, 2017) argue that bad news increases economic efficacy. So, smog got attention when it was burning issue for public so national dailies put it on the list as 'bad news is news'.

National English newspapers have applied environment frames as diagnostic, prognostic, and risk frames. As findings of environment frame shows papers have not only deliberated upon the reasons contextually but also discussed it from regional and global perspective. Framing techniques in diagnostic frames contends about 'global warming, government of administration reasons, knowledge about environment issues, social behavior, and effect of local (individual) and global (collective) activities on environment. Editorials have not only presented the reasons of environment issues but also applied solution journalism that according to researchers (Noack, et al., 2013) convince and motivate readers for action. Moreover, the news item carrying solutions along with problem diagnosis has more sharing and readership than with conflict or problem-oriented stories only. Risk frame as applied by both the papers stress the sensitivity of environmental issues. Solutions frame forward frames to 'create awareness, education, collective action, state's responsibility, coordination beyond borders, resource management and policy &implementation in editorials.

It is found that newspapers have not adequately created awareness on Pakistan Climate change Act 2017. Results show that papers have not taken 2017 Act seriously to inform public over the matter. Since editorials show the policy of newspapers, issues related to environment are not the top agenda rather information on Act is lacking which reinforces the prevailing discourse that government is doing nothing. It is observed that neither Dawn nor the News have written about government performance or criticized more than discussing government performance. Both the English newspapers have share similarities in accentuating object and attribute salience to the issues related to environment protection specially smog except international perspective frame where The News have written more from international perspective than Dawn newspaper. Another difference is between The News and Dawn in sharing scientific perspective in their editorials. All the editorials in The News share scientific discourses on environment issues, however 12 editorials in Dawn appeared without scientific perspective. Although newspapers tried to maintain the balance of using generic and issue specific framing schemes while writing on environment issues, smog has been covered with issue specific frame only.

Industrialization and modernization have a strong impact on living styles and social behaviors of masses. On an international level, industries are adding to economic prosperity but with the heavy cost that is irreparable and highly complex. Meaning thereby the creation of climate change, global warming and all other environmental problems are bringing social problems in societies. Beck in his theory of Risk society theory, as cited in Howes (2013) argues that "modern societies have generated risks that threatens their survival (p.37)". Editorials debate on the US, the superpower or world leader is biggest contributor of carbon emission. The question arises that developed countries enjoy economic prosperity at expense of developing countries

creating environmental issues for them. Later, the same prosperous countries generously allocate funds to rectify the self-generated problems. The environment protection or climate change issues could then be seen from maintaining hegemony over nations or it falls under political economy perspective. The way forward for the future either lies in collective actions to protect the environment or moving back to traditional societies without industries or automobiles. The second option is surely challenging which reminds us to stop exploiting nature and resources.

For effectively protecting environment Boykoff & Yulsman (2013) rightly suggested "not to rest solely with media actors and media institutions themselves. Rather, sustained, and long-term improvements will require a recasting of relationships between and within the realms of science, policy, media, and civil society (p.368)". In Pakistani context, though traditional media is significant but other social & new media and individual participation can bring effective results. Beck's Risk society theory also encourages community action for environment protection.

Conclusion & Recommendations

The issues related to environment protection, including smog, are of serious concern for all stake holders. It is alarming for the matter of survival of the planet, its habitants, and our future generations. Individual human actions and global collective actions are being criticized on all forums to protect the environment from more disastrous consequences. The current research aims at finding that how English national newspapers of Pakistan are creating awareness on environment protection especially smog that engulfed Lahore disrupting lives.

The current research finds that issues related to environment protection have not been given adequate coverage in editorials of Dawn and The News, two English dailies of Pakistan. Smog is discussed only when the crisis surfaces. No editorial is published before and after crisis. Climate change and global warming are the most discussed topics on the list of six-point environmental issues. There is no statistical difference in coverage of both the newspapers with regards to covering smog specially and environment related issue in 15 moths selected duration. Findings depict that both the newspapers have a similar policy for writing on environmental related issues. Most of the editorials apply solution based journalistic techniques. The study discusses local, national, and international reasons of environmental challenges and its remedies. Local and community level participation besides state's measures can be helpful in cause of environment protection.

The study can't be generalized as it is limited to only two national English papers of Pakistan. There is room for taking more newspapers to find answers of research questions for the purpose of general pattern in creating awareness and attributing salience. Also, on this pattern longitudinal study can further help in knowing media's pattern. In addition to it, qualitative methods can also be useful in studying the layers of news text from lens of political economy theory. It is suggested that a thorough communication awareness plan on local level may be devised on regular basis rather than highlighting issue when there is crisis. The implications of this study are for policy makers in government and agenda setters of media

to place environmental issues on topmost priority with strong coordination with local, national, and international stakeholders focusing industrialists and local communities.

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