

Mapping Frames in Environmental Communication: Content Analysis of Down To Earth Magazine

Rashmi Verma^{1*}, Dev Vrat Singh²

^{1*}Assistant Professor (Sr.), Department of Mass Communication, Central University of Jharkhand, Ranchi.

Email: rashmi.verma@cuja.ac.in

²Professor, Department of Mass Communication, Central University of Jharkhand, Ranchi. Email: devvrat.singh@cuja.ac.in

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ARTICLE INFO	ABSTRACT
Submission-25th July, 2023 Revision-23th August, 2023 Accepted- 20th September, 2023 Published-October, 2023	<p>The rising importance of environmental concerns has made environmental communication a relevant area of study. One of the core objectives of environmental communication is to prioritize environment in the agenda of public discourse. In communication studies media framing is considered as an extension to the agenda setting. While agenda setting is more concerned about repeated delivery of message to prioritize an issue in public attention, framing focuses on how and with which effect these issues are seen by public. To study frames in media content, magazine provides opportunity of investigation since this medium is less explored in the environmental communication context. Also as compare to other news media, magazine provides much opportunity to writer/reporter to express their views, explore various angle and present the multiple perspectives in a story. This increases the higher probability of inclusion of different frames in the media content. This research paper provides an insight on media framing in environmental communication with the help of content analysis research method. Total 480 cover stories of prominent environmental magazine Down To Earth have been selected for the purpose of this research. The research objectives of this study are; 1). To explore the availability and extent of various frames and sub frames in the covers stories of DTE. 2). To examine the function and usage of these frames in the cover stories. This exploration is important to identify the presence and prevalence of frames in the content of media and its role in environmental communication discourse.</p> <p>Keywords: Environmental Communication, Framing, Public Discourse, Media Content, Magazine</p>

Introduction

Environment is everything that is around us. All living and nonliving things that surrounds an organism are part of environment. Environmental communication is dissemination of information about environment; it includes a wide range of human interactions with the environment and for related practices. It is an application of communication approaches and strategies for environmental management and its protection. Since environment is part of every one's life, the information about environment has a wider audience and to reach out to wider audience media platform is needed. Media as a major contributor in the manufacturing of the consent is always in the middle of discourse (Herman and Chomsky, 1988). The field of magazine research is still unexplored in the environmental communication context. There have been many research works so far on the coverage of environmental issues in Indian newspapers but as far as magazines are concerned, it is less explored. Also, after analyzing the global trend, it suggests the print industry in India is highly fragmented due to the large number of local regional languages. As per the figure suggested by Statista, revenue in the print newspaper and magazine market in India is forecasted an annual growth rate increase of 1.7 percent. It highlights the interest of people in reading print content and growth of magazine. There is still a demand for high quality content and magazine growth will be widening as the education and income levels increase among

the middle class. Along with the text of other prominent media like newspaper and television, the content of magazine is also important to study for identifying underlying meaning and frame of reference.

Framing in Media Content

The media can have a strong impact in constructing social reality by actively setting and creating frames of references for its targeted audience (Nitz, 2010). Various studies have shown how people think about the environment is largely dependent on how the issues of the environment are framed and communicated in the media. Framing is about selecting some aspect of perceived reality and making them more salient in a communication text, in such a way as to promote a particular problem definition, casual interpretation, moral evaluation and treatment recommendation (Entman, 1993).

The notion of framing has gained stimulus in the communication disciplines, giving guidance to investigations of media content and to studies of the relationship between media and public opinion (Vreese, 2005). Framing appears in everything we see and hear (McMohan, 2017) and predominantly visible in news, editorials, articles and all other media content. The study of media content for gaining understanding of media framing is a pertinent area, as media have significant effect over opinion and policy formation. In an attempt of exploration, framing can be used as a tool to study the media content (media frame) as well as audience perspective about the same (audience frame). The research focuses on the area of media frames, their presence, extent and how they are operational in the cover stories of *Down to Earth* magazine.

The cover story is the first thing readers see when they pick up a magazine because of its projection and impressive presentation on the cover page. It serves as a show window for the reader to grab their attention. It also sets the tone for the entire issue. Often reflects the editorial focus and theme of the magazine for that edition. Investigating the presence and prevalence of the frames in the cover stories of the magazine becomes important when the magazine is promoting environmental communication and discourse. *Down to Earth* magazine is known for its grassroots reporting and research based long story presentation. It covers the problem not only from different parts of the country but also from different parts of the world.

Research Method

The research method for this study is content analysis. Content analysis is a research method that provides a systematic and objective means to make valid inferences from verbal, written or visual data in order to describe and quantify specific phenomena. It is also defined as a method of elevating social reality and shows a manifesto text and a non-manifesto context (Maerten, 1995). For this purpose a code sheet and data has been formulated to study the content systematically and scientifically. The unit of analysis is cover story of each issue, in total 480 units are studied for the purpose of this research. The research objectives of this study are; 1). To explore the availability and extent of various frames and sub frames in the covers stories of DTE. 2). To examine the function and usage of these frames in the cover stories. To fulfill the research objective two separate variables to explore each research objectives are formulated.

Findings and Discussions

The visual representation of the collected data is prepared to make complex data easier to understand at a glance compared to raw numbers, text or table. The presented charts and graphs will be helpful for the purpose of understanding, comparisons and description. The data obtained from content analysis are presented as per the research questions it answers.

Research Objective 1: To explore the availability and extent of various frames and sub frames in the covers stories of DTE

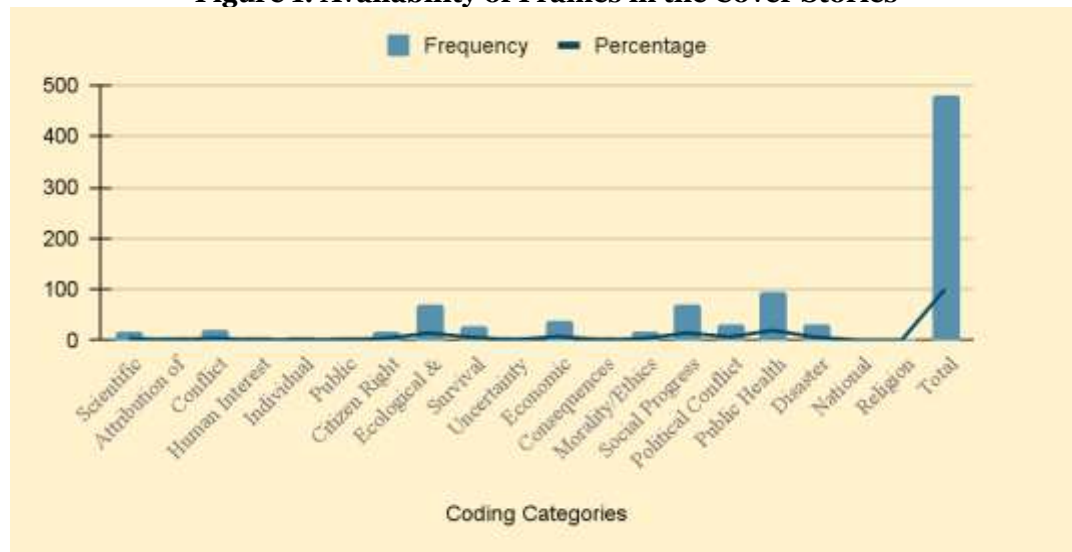
Frames in the text refer to emphasizing certain aspects of a message to give direction to the reader's thoughts. Frames can influence perception and interpretation of the issue. Media uses frames in its content to emphasize one aspect of the issue, making other aspects of reality less highlighted. And it depends from media outlet to outlet that is why the headline of the same news story differs from media to media. Affect the opinion, attitudes and the way information is presented. For example a story about "Death of an unattended patient at hospital" can be framed as a matter of Doctor's negligence, hospital mismanagement, and resources crunch, corruption in a medical institution, unawareness of people or governance failure. So it is the media gatekeepers: reporter, sub editor, editor finally decides which frame, which angle to include, which to exclude, which frame should be highlighted and which one to remain salient in the story. Sometimes these frames can be found in the latent content that is text and mostly they can be identified in the manifested content in the form of subtext. They might not be visibly present but they are present in the underlying meaning.

For the purpose of exploring the availability and extent of various frames and sub frames in the covers stories of DTE, the text and subtext of cover stories are examined. Two broader variables; **Major frames** and **sub frames** are categories in further 20 coding categories. These coding categories are identified with the help of

deductive method. The frames suggested by Semetko & Valkenburg (2000) and other contemporary research work are included in the list. The coding categories which are found in the text are listed in the table 1 and table 2 with their frequencies and percentage.

Major Frames

Figure 1: Availability of Frames in the Cover Stories



The bar diagram illustrates the various frames prevalent in the text of environmental communication. This list of coding categories are identified and listed beforehand as deductive methods with the help of existing research studies conducted in the field. These are the prominent frame prevalence in most studies on framing in environmental communication, for which extensive literature review has been done by researcher. To check the availability of frames in the text and subtext of cover stories of DTE, it has been found that **Public Health** frame has used maximum as per frequency count 94.

Health always remains an important area on which people want to read about but after the health emergency of Covid19 there is a surge in demand for disease, prevention and treatment related information. People's attention has turned towards health as an important area to seek information about. As per its higher percentage in the content, it's evident that most cover stories highlight the health frame prominently. **Ecological & Scientific ValueFrame** and **Social ProgressFrame** are other two prominent frames prevalent in the content of cover stories with similar frequency count that is 70. The presence of **National Security** and **Religion** frame is very less in comparison as these are used very limited time

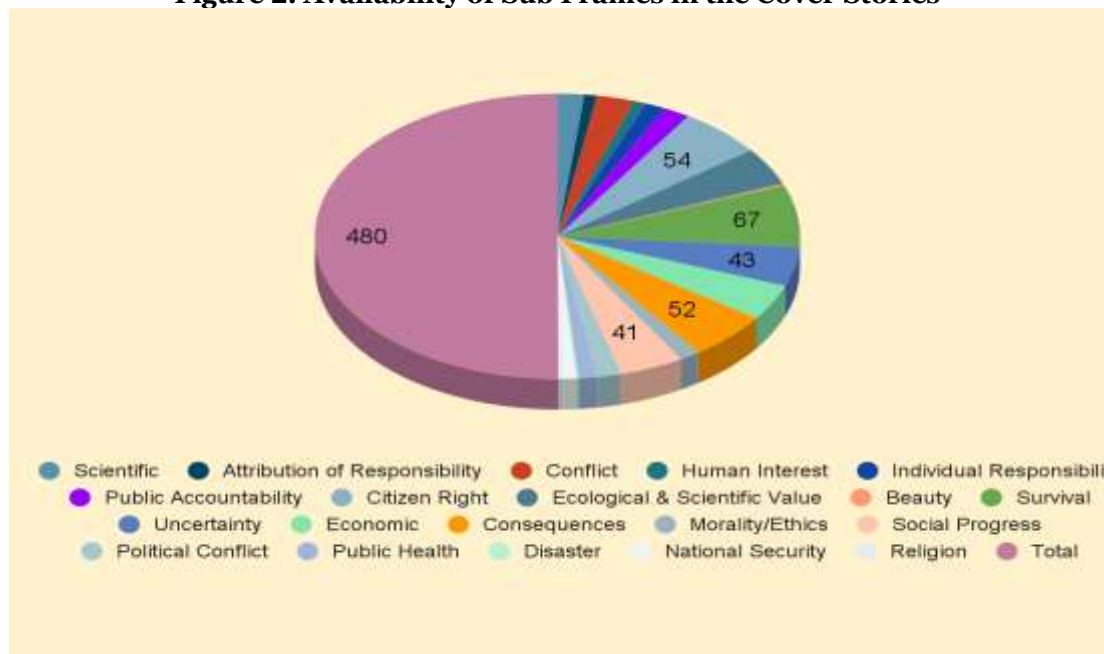
Table 1: List of Major Frames

S.No	Coding Categories	Frequency	Percentage
1.	Scientific	18	3.8
2.	Attribution of Responsibility	6	1.2
3.	Conflict	20	4.2
4.	Human Interest	5	1.0
5.	Individual Responsibility	7	1.5
6.	Public Accountability	7	1.5
7.	Citizen Right	19	4
8.	Ecological & Scientific Value	70	14.6
9.	Survival	28	5.8
10.	Uncertainty	6	1.2
11.	Economic	38	7.9
12.	Consequences	5	1.0
13.	Morality/Ethics	17	3.5
14.	Social Progress	70	14.6
15.	Political Conflict	33	6.9
16.	Public Health	94	19.6
17.	Disaster	30	6.2
18.	National Security	3	.6
19.	Religion	3	.6
	Total	480	100

One frame which was categories in the code sheet but its presence not found in the text is Beauty frame. So it is not showing in the above diagram because of the non-presence.

Sub Frames

Figure 2: Availability of Sub Frames in the Cover Stories



The presented pie chart represents the availability of sub frames in the cover stories. The half of the pie chart is representing the total units considered for evaluation and the other half is representation of categories as per their frequency counts. Where a prominent frame can be identified in the front page, cover story headline, intro or in the overall presentation. The sub frames are more visible in the sub story or in the other components of the story. Sub frames are important as they second perspective reporter, editor wants to put forth before the readers. In this research inquiry the **Survival Frame** with higher frequency count that is 67. The other frames which are prominently highlighted in the cover story as sub frames are **Citizen Right** (54) and **Consequences** (52).

Table 2: List of Sub-Frames

S.No	Coding Categories	Frequency	Percentage
1.	Scientific	18	3.8
2.	Attribution of Responsibility	6	1.2
3.	Conflict	20	4.2
4.	Human Interest	5	1.0
5.	Individual Responsibility	7	1.5
6.	Public Accountability	7	1.5
7.	Citizen Right	19	4
8.	Ecological & Scientific Value	70	14.6
9.	Survival	28	5.8
10.	Uncertainty	6	1.2
11.	Economic	38	7.9
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16.	Public Health	94	19.6
17.	Disaster	30	6.2
18.	National Security	3	.6
19.	Religion	3	.6
	Total	480	100

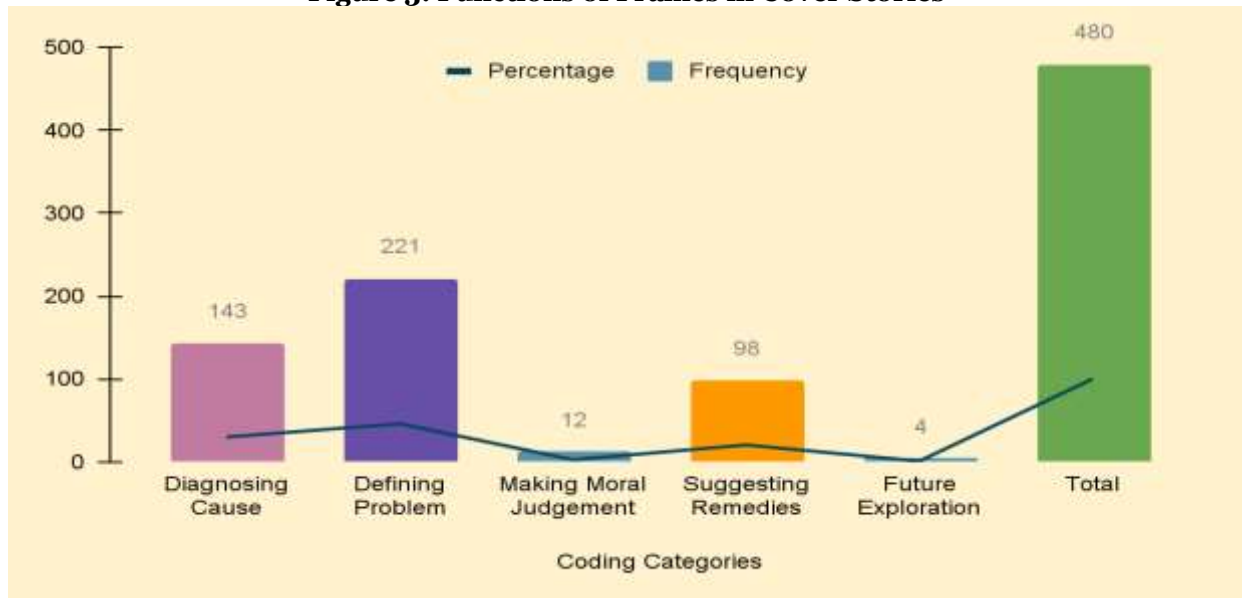
Research objective 2: To examine the function and usage of these frames in the cover stories.

To achieve this research objective, function of frames and its usage has been studied in the text of the cover stories. The result and discussion on findings are as follows:

Function of Frames

The purpose of this inquiry is to see what the core purpose to use the frame is. It further help the reader to understand and react to the problem stated in the story. The theoretical underpinning for this variable comes from the work of Entman (1993) in which key functions of frames are discussed as defining a problem, interpretation of a cause or setting causal interpretation, moral evaluation and treatment recommendation.

Figure 3: Functions of Frames in Cover Stories



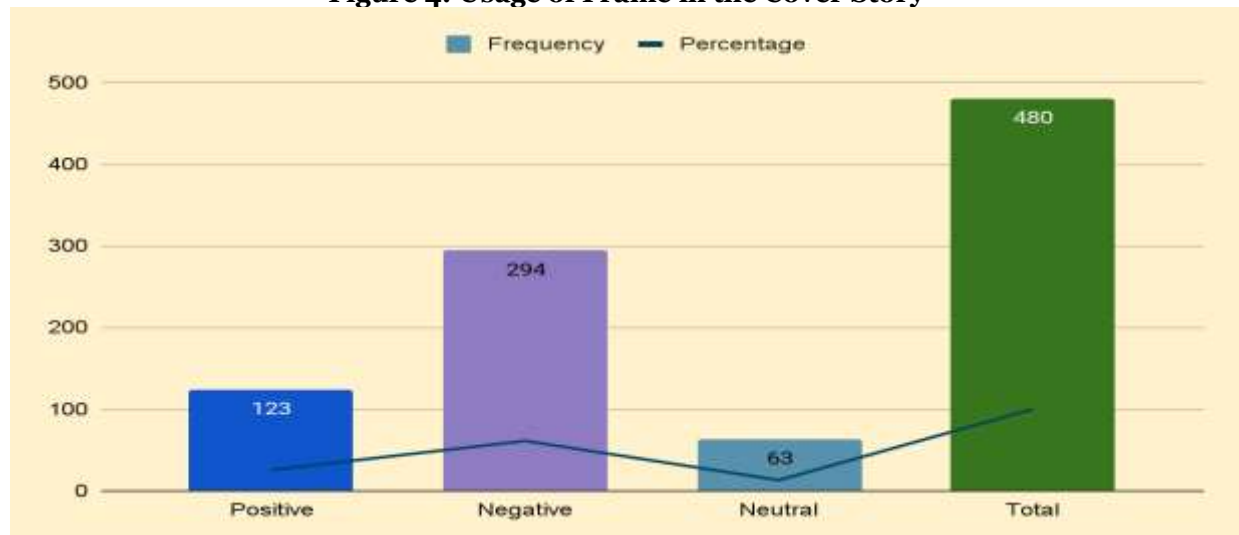
As the above bar diagram represents, the category **Defining Problem** emerges as a higher prevalent function of frame in the cover story with 221 frequencies. Most frames are used to define the problem whether it's related to the environment. Health, Governance. Policy etc. Then **Diagnosing Cause** of the problem discussed in the cover story is mostly visible (143) and **Suggesting Remedies** (98) remains the third prominent function of used frame in text.

Table 3: List of Function of Frames

S.No	Coding Categories	Frequency	Percentage
1.	Diagnosing Cause	143	29.8
2.	Defining Problem	221	46
3.	Making Moral Judgment	12	2.5
4.	Suggestive Remedies	98	20.4
5.	Future Exploration	4	.8
6.	Total	480	100

Usage of Frames

Figure 4: Usage of Frame in the Cover Story



This research inquiry is an extension to the prior variable about the function of frame. This variable explores whether the frame has been used with positive connotation or with negative. Here positive means whether the frame is presenting the problem in a positive, suggestive or constructive manner. The negative usage of frame means that the frame is associated with a negative connotation of criticism, fear or anything that senses negative feelings by reading it. Though there is an important point to consider that in journalism negative projection is also for the betterment of society. Because if journalists have to most of the time comment, critically evaluate, criticize the key functionaries of society to challenge the status quo. To make the lives of people better they use the frame in a negative light as well. It is evident from the above bar chart that the frequency of **Negative Usage** of frame is higher with 294 count and **Positive Usage** of frame remains at 123 counts.

S.No	Coding Categories	Frequency	Percentage
1.	Positive	123	25.6
2.	Negative	294	61.2
3.	Neutral	63	13.1
	Total	480	100

Conclusion and Recommendation

With the changing time, world is witnessing drastic changes in environmental. Issues related with environment are volatile and beyond the control of human. This change is drastic and need all human attention. To bring environment in the public discourse and prioritize it, role of media is crucial. Media not only bring the issue on the center stage of discussion but also it emphasis on the fact that how any issue to be seen. It selects some aspect of the perceived reality and highlights some aspect of it with the help of framing. Framing as major focus area of contemporary media environment emphasizes on how media represents a specific topic by drawing attention to specific issue.

Media presents any information from its perspective which is further received and interpreted by audience of media from their own perspective, this is the reason why media frames and audience frame can be differ. But media frame becomes more viable and visible in force because whatever appears in media people tends to take it as truth. Media frame direct the thought process of audience to major extent. Exploration of media content becomes important and examining it in context of framing has become a contemporary area of research for communication scholars worldwide. In this study, the presence and prevalence of various traditional frames, sub frames, their functions and usage are investigated. In findings it's evident that there are some media frames which are more visible in the text and subtext. And media use it to highlight some facts and to bring the news or social issue in the priority of its readers.

The cover stories of the Down to Earth magazine too present the environmental, health; ecology based interpretative stories with different perspective, news angle just to bring the issue in public attention. The researcher recommends that sometime the overlapping is seen in the traditional frames suggested by scholars of framing field. This overlapping should be excluded and new frames can be added as per contemporary need. Research also recommends that along with media frames, exploration on audience frames should also be there to understand the impact of the media message on audience. Though there is long tradition of impact study evaluation in communication discourse but studying and examining it from the perspective of framing theory are comparatively less. The future study should explore not just how media is framing some aspect of reality but also identify, examine and interpret how audience is perceiving and making meaning out of it using their own frames of references.

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