

Liberal Journal of Language & Literature Review

Print ISSN: 3006-5887

Online ISSN: 3006-5895

<https://llrjournal.com/index.php/11>

**Pakistan's Water Challenges: A Systemic Functional Analysis of
Dawn and The News International Editorials**



¹Sadia Inayat, ²Dr. Kamran Ali,

^{*3}Tahira Abdul Hakeem

¹Asst. Professor, Centre of English Language and Linguistics, Mehran University of Engineering and Technology, Jamshoro, Pakistan. Email: sadia.memon@faculty.muet.edu.pk

²English Linguistics, Department of English, Faculty of Social Sciences, Hamdard University, Karachi, Pakistan. Email: dr.kamran@hamdard.edu.pk

³Lecturer, Department of Sciences and Humanities, FAST National University of Computer and Emerging Sciences, Karachi, Pakistan. Corresponding Author Email: tahira@nu.edu.pk

Abstract

This paper draws a comparison between *Dawn* and *The News* through Systemic functional linguistics (SFL) in an attempt to identify how linguistic decisions used frame the water scarcity problems faced by Pakistan. The paper will be based on the metafunction framework developed by Halliday (1994) to analyze theme-rheme structures and transitivity processes in 10 editorials published between 2024 to 2025. A mixed-method approach was used, with a qualitative textual analysis being used alongside quantitative frequencies of marked and unmarked themes and process types. The results indicate that *Dawn* focuses on systemic change and institutional accountability, whereas *The News* accentuates human agency and accountability. Such language patterns show how grammatical forms encode ideology and the means through which the public can be informed about national matters, which can be applied to the study of media literacy, journalism, and discourse.

Keywords: Thematic Analysis, Transitivity, Ideological Framing, Systemic Functional Linguistics, Media Discourse.

1. Introduction

A combination of hydrological stress and macroeconomic instability, which have been increasingly experienced in Pakistan in 2024-2025, is a national crisis. The chronic water scarcity in both urban and agricultural regions, declining per-capita access to water, and ineffective irrigation techniques that put food production and livelihoods under threat were repeatedly mentioned in the media reporting in 2024 and 2025 (Dawn, "Water for some; Dawn, Agriculture: Water scarcity - an irrigation crisis). Meanwhile, the release of the Pakistan Economic Survey 2024-25 and media reports on the topic were indicative of a slow growth rate, elevated inflation in previous years, and limited fiscal room - all of which make them susceptible to environmental shocks and diminish adaptive capacity (Dawn, "Economic Survey 2024-25: Growth stumbles..."). These similar strands of thread water infrastructure lack and poor macroeconomic future position, these two join forces establish the empirical phase of analysis of how national newspapers framed responsibility and urgency, and potential solutions.

SFL would be specifically apt for this research since it makes the connection between

clause grammar and social meaning through three interrelated metafunctions: ideational (who does what to whom), interpersonal (stance, modality), and textual (information flow in terms of Theme and Rhyme). The SFL tools' transitivity analysis to categorize material, mental processes, relational processes, verbal processes, behavioral processes, existential process; theme analysis to distinguish between marked and unmarked Themes; close attention to nominalization and agency help researchers to pass beyond the surface wording in their research to claims about ideological orientation (Hallidayian tradition). Published in 2024-2025, the empirical SFL research proves the usefulness of these techniques when it comes to the news discourse in Pakistan, which offers methodological precedents and coding strategies that can be easily applied to the Dawn vs. The News comparison.

Media discourse analysis is important since newspapers are not merely reporting events that take place but create social realities through what actors, processes, and circumstances they foreground. During crises, the word choices (whether the state of the economy is the kind of thing that fell or the bundle of policy choices that resulted in contraction) can determine what the reader attributes to agency and blame, and it can impact what kind of policy discussion will ensue. Studies based on critical discourse and SFL indicate explicitly that strategies such as thematic organization (Theme-Rheme), types of processes (Transitivity), and nominalization can either bring to the forefront human/institutional actors or mislead agency to the advantage of the abstract processes, and such a shift has a definite political effect. These framing decisions, hence, are important to the citizen comprehension and democratic responsibility in the turbulent 2024-25 episode in Pakistan.

Although much has been said about the water shortages in Pakistan, as well as economic indicators in 2024-25, very little clause-level comparative analysis has been done, indicating how two of the most popular English-language newspapers, Dawn and The News, linguistically make these crises. Namely: Have the newspapers grounded human agency (which may depoliticize accountability) in marked Themes and inanimate nominalizations, or do they use agentic material processes and interpersonal modalities that directly place responsibility and demand action? What

are the agency distributions in their transitivity decisions between government bodies, market actors, forces of nature, and the victims? The responses to these questions through SFL tools will demonstrate how the media discourse leads to the formation of people's awareness - and policy pathways - in the face of the 2024-25 water and economic crisis in Pakistan.

1.1. Research objectives

1. To analyze the linguistic choices that represent the water scarcity issue in Pakistani newspapers.
2. To determine the foregrounded and backgrounded agencies on the issue of water scarcity.

1.2. Research Questions

1. How do two Pakistani newspapers represent the issue of water scarcity through linguistic choices?
2. What is foregrounded and backgrounded on the issue of water scarcity?

2. Literature Review

Pakistani scholars have been progressively using the framework of linguistics to interpolate how media discourse operates in constructing social reality in the last few years. The research article by Fatima et al. (2024) is also noteworthy as they performed a systemic functional linguistic (SFL) analysis of the nominalization in the Pakistani English news articles. They discovered that nominalizations of processes (e.g., development, reduction, implementation, etc.) are the most common, and thus transformed dynamic processes into abstract objects, and agentic actors remain obscured. Their data showed that these transformations enable journalists to report events more neutrally or detachedly, with less overt blaming of responsibility and, as such, moderate ideological positioning. This paper highlights the fact that grammar as a meaning-making in news discourse is itself a meaning-making. Simultaneously, Habib and Zahra (2024) carried out an eco-linguistic study on the representations of floods in the selected Pakistani print media and discussed the semiotics of climate change and disaster through the semiotics of linguistic and visual articulation of disasters. Even though they did not strictly apply the SFL methodology of the metafunctional analysis of media discourse, their contribution proves that the lexical

and thematic strategies of the discourse about the environmental crisis generate emotional responses, foreground vulnerability, and influence the population in their perceptions of environmental threat. Faraz and Saleem (2024) are another relevant study that investigated the organization of the discourse on the topic of the China-Pakistan Economic Corridor (CPEC) in relation to the Eco linguistics approach to the issue; the corpus analysis showed that the concept of development was often organized using nominalization, passive constructions, and unmarked themes - thus, putting the reader in a passive posture instead of an active participant of the process. All these studies point to one pattern: the discourse of Pakistani media is inclined to make use of the linguistic strategies (nominalization, unmarked themes, passive agency) that predetermine the positioning of readers and the ideological meaning.

This picture is expanded to encompass more general media framing research in other areas, not necessarily environmental or economic. As an illustration, Salahuddin (2024) examined the Pakistani politics as framed by the media and perceived by the audience and pointed out the central role of language in mediating the attitudes of people and supporting the dominant narratives. Her approach was not necessarily SFL, but the study demonstrates the role of linguistic framing in the ideology and opinions of people. In addition, Naveed et al. (2025) investigated gender neutrality in Pakistani-based newspapers concerning a critical discourse approach and discovered that even though gender neutrality is superficially employed in the newspapers, hidden gender hierarchies and biases in representing the gender issue prevail in the news language. Although this is not explicitly SFL-based, it is another example that language decisions in media communication are ideologically charged.

There are still great gaps in spite of the progress in these spheres. Numerous studies concentrate on single genres (e.g., flood reporting, textbooks, gender in media) or on single outlets; few studies adopt a comparative analysis of SFL in major national newspapers in multiple issues, particularly in relation to such fundamental issues of the country as water scarcity or economic instability in 2024-2025. Especially, the two-fold emphasis on the thematic (marked vs unmarked theme) and transitivity (process type and participant role) analysis in leading English newspapers is not well examined. It is an acute gap in the light of the conditions of water crisis

and economic instability in Pakistan, in which the media framing would be a potent tool of creating the perception of a reader and policy discourse.

Considering such a situation, the current research is aimed at elaborating upon these previous studies by using a hybrid SFL thematic-transitivity system to conduct a comparative study of two large English newspapers - Dawn and The News - to discuss Pakistan's water scarcity issues in 2024-2025. In this way, it builds upon the past studies (Fatima et al., 2024; Habib and Zahra, 2024; Faraz and Saleem, 2024), providing not only individual-genre and individual-outlet perspectives but a cross-paper comparative perspective with a clause-level detail. This comes at an opportune time since the way language constitutes agency, responsibility, and topical focus is important in bringing out how the media discourse can influence socio-political realities in the crisis facing Pakistan.

3. Methodology

3.1. Research Design

The current research design is a mixed-method research that incorporates both qualitative and quantitative aspects in order to have a comprehensive picture of the linguistic patterns in Pakistani English newspapers. The qualitative aspect is based on the explanation of the Systemic Functional Linguistics (SFL) model by Halliday (1994) that enables an elaborate analysis of how meaning-making was conducted in the news discourse. This method is appropriate in the analysis of the process of newspaper construction of agency, responsibility, and ideology as it focuses on the interdependence of the structure of language and social action. The quantitative element, however, entails descriptive statistics calculation of the occurrence and distribution of the linguistic characteristics, namely, thematic and transitive structures, in the two sampled newspapers. Such a qualitative and quantitative approach not only enables increased validity of the findings but also offers a more realistic picture of both interpretive sense and visible linguistic patterns. This type of mixed-method methodology corresponds to the suggestions of Creswell and Plano Clark (2018), who state that a combination of interpretative and statistical analyses allows deepening, improving reliability, and analytical triangulation in discourse-based research.

3.2. Data Source and Sampling

The resources used in this study include editorials that were published in two English-language Pakistan-based newspapers, which are considered the top two: Dawn and The News International, between April 2024 and May 2025. These newspapers have been chosen according to the large circulation of these papers, the integrity of their editorials, and the impact they have on the discussion in Pakistan. The sampling technique applied was a purposive sample in the sense that it was relevant and topically coherent to the research questions of the study. They were concerned with the water scarcity problem, the crisis of the Indus Basin, and economic reforms—themes of national discussions of 2024-2025 years. Every newspaper provided five editorials, which were chosen, and a corpus of about 270 clauses was formed. The selection criteria were as follows: (1) the article had to contain explicit mention of the water crisis or economic development; (2) it had to be published within the set timeframe; and (3) it had to be written by an editorial staff member and not by an opinion contributor to provide uniformity in the style and institutional language. Such a corpus size makes it possible to have both the depth of qualitative analysis and a certain amount of quantitative descriptive frequency comparison, as suggested by Fairclough (2010) when conducting critical discourse studies.

3.3. Analytical Framework

The analytical model is based on two key dimensions of the SFL model developed by Halliday (1994), that is, the thematic structure and the transitivity system.

3.3.1. Analytical Structure: Thematic Structure Analysis:

At the level of clauses, marked and unmarked themes were identified and characterized by thematic analysis. The theme in SFL is that of the departure of the message, which is the psychological subject of the clause. Unmarked themes are usually seen when the grammatical subject is the same as the theme, whereas marked themes are seen when another element (adverbial or complement) has been placed in the first position to emphasize or contrast (Eggins, 2004). This paper will examine how each of the newspapers previews some idea, actors, or circumstances by establishing whether a clause starts with a marked or unmarked theme and thus the subtle presentation of ideological standpoints.

3.3.2. *Transitivity System Analysis:*

The transitivity system was analyzed to discover the representations of actions, participants, and circumstances in the texts. The six types of processes proposed by Halliday (1994) were used: material (actions/events), mental (perception, cognition), relational(state/identity), verbal (Speech acts), behavioral (physiological/psychological behavior), and existential (Existence statements). Each clause was studied in terms of the type of process and the roles of the participants (Actor, Goal, Sensor, Carrier, Sayer, and so on), which, combined, demonstrate how the linguistic construction of agency and responsibility is made. This dimension shows the attribution of blame or responsibility of the water crisis to particular actors (e.g., government, farmers, or external factors) by the media or the concealment of agency through passive constructions or nominalization.

3.4. Procedure

The analysis was done in a number of systematic steps.

- a) ***Data Preparation:*** The downloaded editorials were in the form of text, and each article was given a different code (e.g., D1-D5 to Dawn and N1-N5 to The News). Unrelated textual information, like advertisements, captions, and photo credits, were removed.
- b) ***Clause Segmentation:*** Each editorial was divided into clauses according to Halliday's and Matthiessen's (2014) clause-complex framework in order to make sure that each unit corresponded to one process or event.
- c) ***Thematic Coding:*** The thematic coding was performed with the help of manual coding when the themes were detected at the very start of every clause. All the themes were marked or unmarked. The frequencies were estimated in both types of themes in the two newspapers, and this should have allowed comparison in the scope of the quantitative picture.
- d) ***Transitivity Coding:*** Clause coding involved coding of the process type and participant role. This was the step in accordance with the functional categorization principles developed by Halliday (1994) and Eggins (2004). To be consistent in classification, there was a codebook that was kept, and the unclear points were resolved through peer review.

- e) *Analysis of Numbers*: After the coding was done, the descriptive statistics (frequencies and percentages) were performed to demonstrate the frequency of the process type and thematic structure used in each newspaper. Comparative charts and tables were drawn to indicate the disparities in the linguistic performance of agency and topical emphasis.
- f) *Interpretation*: The results of the thematic and transitivity analysis were combined and analyzed qualitatively. The grammatical decisions were considered as the expression of ideological position, editorial framing, and socio-political orientation in the Pakistani context of 2024-2025.

4. Results and Discussion

Using Halliday's SFL model, a total of 270 clauses from two Pakistani newspapers, Dawn and The News International, were analyzed into theme-rheme structures. Each newspaper contributed 135 clauses from five editorials published between 2024-2025 on Water Crisis. Table 1. shows the number of editorials selected from each respective month in 2024 and 2025. For the analysis purpose, first twenty-seven clauses were selected from each editorial. The selection of twenty-seven clauses was based on the editorial that had lowest number of clauses i.e. 27 clauses in Dawn newspaper. To maintain consistency, same number of clauses were selected from each editorial. Each theme was further categorized into textual, marked topical (Circumstantial + participle), unmarked topical, and interpersonal themes following Halliday's framework.

Table 1: *Number of Editorials selected from each month in 2024 and 2025*

Month	No. of Dawn Editorials	No. The News International Editorials
April (2024)	1	1
Aug (2024)	0	1
March (2025)	2	2
April (2025)	1	1
May (2025)	1	0
Total Articles	5	5

4.1. Textual Metafunction

Findings reveal that *Dawn* newspaper shows a higher degree of unmarked themes with a total of 98 out of 135 themes, in comparison to *The News International* which had a frequency of 90 unmarked themes out of total 135 clauses. The percentage difference between both the newspapers is recorded as 5%. Similarly, the distribution of marked themes is dominant in *The News International* with a frequency of 45 out of 135. The percentage difference was noted as 5%. The dominant marked theme in the majority of the clauses is circumstantial, which begins the clause with a focus on location and time rather than the subject.

Table 2: *Total number of marked and unmarked themes*

Newspaper	Total Clauses	Marked Themes	Unmarked Themes	% Marked	Dominant marked Type
Dawn	135	37	98	27.4%	Circumstantial
The News	135	45	90	33.3%	Circumstantial

According to Halliday (1994), theme can further be categorized into four major types. These types include textual, marked topical, unmarked topical and interpersonal. Table 3 shows the percentages of sub-types of theme analyzed in *Dawn* newspaper. Unmarked topical themes stood the highest with a total of 77 out of 135 themes followed by marked topical themes which includes circumstantial and participle themes with a total of 34 themes. Additionally, textual themes were also analyzed with a frequency of 21 showing connections between clauses that results in the creation of compound and complex sentences. Least employed themes were interpersonal showing direct and objective mode of reporting.

Table 3: *Percentage of Theme Sub-types in Dawn newspaper*

Theme sub-types	Total Number	Percentage (%)
Textual	21	15.5%
Marked Topical (Circumstantial + participle)	34	25.1%
Unmarked topical	77	57%
Interpersonal	3	2.2%

Table 4 shows the frequency and percentage of theme subtypes in The News International editorials. Highly used theme is unmarked topical with a number of 65 out of 135 themes, which is, however, less than unmarked themes seen in Dawn editorials. In contrast, the number of marked topical themes in The News International is higher than Dawn newspaper with a total of 44 themes. Similarly, the number of textual themes in The News exceeded the Dawn editorials by 4.5%. However, interpersonal themes ranked lowest, with only 1 occurrence showing the objective nature of editorials.

Table 4: *Percentage of Theme Sub-types in The News International newspaper*

Theme sub-types	Number	Percentage (%)
Textual	25	18.51%
Marked Topical (Circumstantial + participle)	44	32.5%
Unmarked topical	65	48.1%
Interpersonal	1	0.7%

4.1.1. Unmarked topical Themes

Analysis of the textual metafunction revealed a dominant use of unmarked topical Themes in both newspapers, showing that the text adheres to conventional English clause organisation and maintains informational clarity.

The examination of the clauses from *Dawn*'s editorials in Table 5 shows a clear dominance of unmarked topical Themes, as majority of the clause in the sample begins with the grammatical subject (e.g., *These words*, *The signs*, *Chashma reservoir*, *Pakistan*, *we*, *Climate disasters*). This thematic choice suggests that the newspaper follows a typical, subject-initial structure commonly employed in hard news and editorial writing. The text foregrounds actors and entities involved in the water crisis by maintaining unmarked themes, while presenting information in a direct and easily processable manner. A reputable newspaper is expected to maintain an objective and authoritative tone. This aim is achieved by the usage of marked themes in selected clauses that enhance textual clarity, stability, and cohesion.

Reader's perception is also created on the basis of the usage of unmarked themes. The

Liberal Journal of Language & Literature Review

Print ISSN: 3006-5887

Online ISSN: 3006-5895

repetitive use of phrases such as *Pakistan*, *we*, *the water scarcity*, and *the danger*, the article subtly reinforces a collective national narrative, portraying water scarcity as a shared threat affecting the entire country. In a similar vein, the editorial gives environmental causes agency and urgency by emphasising entities like Chashma reservoir or climate disasters in Theme position, portraying them as pressing forces on Pakistan. Dawn's inclination towards unmarked themes reflects its adherence to coherence and informational neutrality while also making the reader focus on key actors and processes involved in shaping the water crisis narrative.

Dawn Newspaper

Clause	Theme	Rheme	Type
These words by Benjamin Franklin ring especially true for Pakistan today	These words by Benjamin Franklin	ring especially true for Pakistan today	Unmarked Topical
The signs are all around us	The signs	are all around us	Unmarked Topical
Chashma reservoir too is near depletion	Chashma reservoir	is near depletion	Unmarked Topical
The water scarcity is predicted to worsen going forward	The water scarcity	is predicted to worsen going forward	Unmarked Topical Theme
Pakistan has been facing a severe water crisis	Pakistan	has been facing a severe water crisis	Unmarked Topical Theme
Pakistan is among the most water-stressed countries in the world	Pakistan	is among the most water-stressed countries in the world	Unmarked Topical Theme
the country can... overcome increasing water insecurity	the country	can overcome increasing water insecurity through	Unmarked Topical Theme

through the efficient	the efficient	
management of its	management of its	
water resources	water resources	
we are already We	are already	Unmarked
experiencing post-	experiencing...	Topical
climate change		Theme
conditions		
we were first hit by We	were first hit by a	Unmarked
a heatwave and	heatwave and	Topical
drought...	drought...	Theme
the danger is very the danger	is very visible	Unmarked
visible		Topical
		Theme
Climate disasters Climate disasters	can severely	Unmarked
can severely stretch	stretch a country's	Topical
a country's	resources	Theme
resources		

Table 5. Clause with Unmarked theme in Dawn Newspaper

The thematic analysis of the selected clauses from *The News International* in Table 6 reveals a strong reliance on unmarked topical Themes, with all clauses beginning with the grammatical subject. This writing style underscores the newspaper's inclination for a direct and assertive reporting style, commonly seen in political and economic debates. Key institutional actors such as *Indus River Authority (IRSA)*, *the government*, *Water companies*, *Pakistan*, *Sindh*, and *the federal government* are foregrounded in the clause-initial position. This emphasis highlights the newspaper's approach of directing responsibility, accountability, and agency in water-scarcity issues.

The News International constructs a narrative of institutional failure and national urgency by continuously placing institutional and national actors in the Theme position. The Themes like *the government*, *Pakistan*, *Water companies*, and *the federal government* focus on the discussion around actors who control power and possess authority to exercise it. Similarly, *Sindh* and *Water shortages* are placed on

the front to emphasize the multiple regional implications of the crisis. The analysis suggests that the water issue is not simply an environmental crisis rather it is highly political in nature.

The usage of Themes such as ‘we’ reflects a collective voice, showing the public as part of the problem and solution. This pronoun depicts a failure on the part of institution on neglecting this issue while it also functions ideologically to encourage national unity and shared responsibility. Moreover, the clauses such as ‘*The consequences of such a shortage*’ shift attention to the urgency of the situation, demanding serious actions to be taken by the state.

The choice of unmarked themes in *The News International* reflects a desire for clarity and directness while also strategically foregrounding institutional actors, regional vulnerabilities, and national consequences, creating an implicit ideological message that the water crisis is deeply connected to governance issues and requires thorough accountability, suitable measures, and political will.

The News International					
Clause			Theme	Rheme	Type
Indus River Authority (IRSA) says			Indus River Authority (IRSA)	Says	Unmarked
					Topical
					Theme
Water shortages... mean			Water shortage	Mean	Unmarked
					Topical
					Theme
Water distribution... is a disputed issue			Water distribution...	is a disputed issue	Unmarked
					Topical
					Theme
Pakistan can face huge challenges			Pakistan	can face huge challenges	Unmarked
					Topical
					Theme
Pakistan cannot afford to commit avoidable mistakes			Pakistan	cannot afford to commit...	Unmarked
					Topical
					Theme

The country must realize	The country	must realize	Unmarked Topical Theme
the government is much more responsible...	the government	is much more responsible...	Unmarked Topical Theme
Water companies in our country have been given the licence to exploit natural resources against a nominal fee and make money.	Water companies...	have been given the licence to exploit natural resources against a nominal fee and make money.	Unmarked Topical Theme
we cannot lose this lone source of water	we	cannot lose this lone source...	Unmarked Topical Theme
Sindh is on the brink of a severe water crisis	Sindh	is on the brink of a severe water crisis	Unmarked Topical Theme
The consequences of such a shortage are dire, threatening agricultural production and drinking water supplies across the region	The consequences of such a shortage	are dire, threatening agricultural production and drinking water supplies across the region	Unmarked Topical Theme
The federal government must not take the growing protests in Sindh lightly	The federal government	must not take the growing protests in Sindh lightly	Unmarked Topical Theme

Table 6. *Clause with Unmarked theme in The News International Newspaper*

While both *Dawn* and *The News International* primarily use unmarked topical Themes, the focus of their Themes varies significantly, disclosing contrasting editorial preferences. *Dawn* emphasizes structural and long-term causes of the problem, especially climate change and ecological vulnerability. *The News International*, on the other hand, emphasizes political and institutional players, portraying the situation as an issue of poor administration, accountability, and governance. As a result, *The News* employs an argumentative, actor-focused approach while *Dawn* takes a descriptive, analytical attitude emphasizing vulnerability.

4.1.2. Marked topical Themes

To guide reader interpretation, the newspaper deliberately uses circumstantial and evaluative information in the spotlight. Before introducing the main clause, initial clauses such as “Ranking as we do among the top 10 countries...”, “This year we may have averted any significant damage...”, and “Yet, despite these alarming signals...” use temporal and evaluative adverbials as Themes, placing the information contextually. Likewise, spatial and situational elements like “At the urban level...” and “In large parts of Karachi...” serve as circumstantial marked Themes, stressing place or scope before presenting the main action.

This style contradicts the earlier usage of unmarked topical Themes, reflecting that *Dawn* deliberately uses marked themes to signal shifts in perspective, emphasis, or evaluative stance. The major purpose of using marked themes is to make provide the context by adding temporal or spatial orientation and frame urgency of the matter, while also making the text engaging. Phrases such as “despite these alarming signals” or “On this World Water Day” direct the attention towards the specific occasions and deadlines helping readers to interpret the importance of propositions and related actions.

Dawn			
Clause	Theme	Rheme	Type
Ranking as we do among the top 10 countries...	Ranking as we do	we must urgently prepare ourselves...	Marked Theme
This year we may have	This year	we may have averted	Marked Theme

averted any significant damage...		any	significant	
despite these alarming signals, we continue to squander what little water we have	despite these alarming signals	we continue to squander what little water we have		Marked theme
At the urban level, water metering, leak detection, and wastewater recycling should be mandatory components of municipal planning	At the urban level, water metering, leak detection...	should be mandatory components of municipal planning		Marked theme
On this World Water Day, Pakistan must recognise	On this World Water Day,	Pakistan must recognise		Marked theme
On the face of it, the schemes for new irrigation channels, water conservation and recycling in the urban areas and investments in water storages do not appear to have any linkage	On the face of it	the schemes... do not appear to have any linkage		Marked theme
IN large parts of Karachi, there is no water to be had	IN large parts of Karachi	there is no water to be had		Marked Circumstantial

Table 7. *Clause with marked theme in Dawn Newspaper*

The News International, as displayed in table 8, shows a strategic foregrounding of temporal, locational, and structural elements guiding reader's interpretation of events

and their significance. Before presenting the main information, clauses such as “*that from April 1 to June 10, there will be no water available*”, “*This year, particularly, the lack of snow... has resulted in a dip...*”, and “*On Monday, Adviser to the Prime Minister... had assured Sindh Senior Minister Sharjeel Memon*” employ temporal adverbials as Themes, building a clear chronological context. Likewise, space bound Themes, such as “*In Karachi*” and “*From urban centres like Karachi*”, highlight the spatial scope of the issue, highlighting affected areas before explaining the consequences.

Additionally, conditional Themes such as “*Had the government been quick...*” frame conditionality, providing rhetorical cues about causality or possibility. Topical elements such as “*people*” and “*the government*” are often embedded within these marked Themes, combining situational or temporal framing with agent focus.

The News

Clause	Theme	Rheme	Type
April 1 to June 10, there will be no water available	from April 1 to June 10 + there	will be no water available...	marked
This year, particularly, the lack of snow... has resulted in a dip...	This year (Theme Time) + the lack of snow...	has resulted in a dip...	marked
At a time when other countries... are ever-ready	At a time (Theme Time)	other countries... are ever-ready	marked
in a world of technological advancements, Pakistan can act independently.	in a world... (Theme Location) + Pakistan	can act independently	marked
In Karachi, water shortages are a norm	In Karachi (Theme Location)	are a norm, with people relying on private tankers to meet their water needs	marked
Now that people have been left on their own	Now that (Theme Time) + people (Topical)	have been left on their own	marked
(Conditional) Had the	Had (Structural/Finite) +	been quick at meeting	marked

government been quick...	the government (Topical)	people's	domestic
		water needs	
From urban centres like Karachi, where taps run dry for days	From urban centres like Karachi	where taps run dry for days	marked
On Monday, Adviser to the Prime Minister on Political and Public Affairs Rana Sanaullah had assured Sindh Senior Minister Sharjeel Memon	On Monday	Adviser to the Prime Minister... had assured Sindh Senior Minister Sharjeel Memon	marked

Table 8. Clause with marked theme in The News International Newspaper

While both *Dawn* and *The News International* employ marked Themes to provide context, the nature of these Themes differs according to their editorial focus. In *Dawn*, marked Themes frequently take the form of evaluative, temporal, or circumstantial adverbials, such as “*This year*”, “*despite these alarming signals*”, and “*In large parts of Karachi*”, which frame information with emphasis on urgency, context, or moral evaluation. This thematic choice reflects climate-related processes and systemic risks, strengthening *Dawn*’s analytical and cautionary stance. On the other hand, *The News International* foregrounds time-bound, space-bound, and condition-bound elements often coupled with institutional or human actors, such as “*On Monday*”, “*In Karachi*”, and “*Had the government been quick*”. These Themes serve to situate events in context while emphasizing responsibility and accountability altogether, reflecting the newspaper’s governance- and policy-oriented stance.

4.1.3. Textual and Interpersonal Themes

Textual Themes such as *and*, *but*, *that*, and *however* are used in both *Dawn* and *The News International* to create unity and guide readers through the flow of information; however, their purposes and frequency varies. Textual Themes in *Dawn* such as “*that the water crisis confronting us*,” “*and the matter*,” or “*However, water regulator Irsa...*” functions to connect arguments logically, build extended commentary, and sustain a formal, editorial tone. They help the writer in developing a cohesive

explanation of reasons, effects, and solutions within a particular context. In contrast, *The News* uses textual Themes like “and it’s all about water,” “that all concerns regarding the controversial canals project...”, and “but also pose a significant ecological threat” in a more event-oriented, report-like manner, guiding the text move swiftly between problem description, ongoing events, and policy controversies.

Themes	Examples from Dawn	Examples from The News
Textual	<ul style="list-style-type: none"> • that the water crisis confronting us • and the matter • and the crisis persisted • and profiteers • However, water regulator Irsa • that is putting millions of lives at risk 	<ul style="list-style-type: none"> • and it’s all about water • that all concerns regarding the controversial canals project • and yet no final decision has been made • but also pose a significant ecological threat
Interpersonal	<ul style="list-style-type: none"> • Unfortunately, no material good came from any of it 	<ul style="list-style-type: none"> • To be fair, their fears are neither new nor unfounded

Table 9. Textual and interpersonal themes in Dawn and The News

Interpersonal Themes appear in *Dawn* more, as seen in expressions such as “Unfortunately,” and “To be fair” than *The News*. In both the newspapers, these themes foreground the writer’s judgment, stance, and evaluative attitude, signaling an editorial voice that interprets events rather than merely reporting them.

4.2. Ideational Metafunction (Transitivity)

The ideational metafunction highlights the experiential meaning of the text, revealing how processes, participants, and circumstances construct the water crisis as a material, political, and ecological reality. Table 10 shows the frequency of process types in the selected clauses from *Dawn* and *The News*. Both newspapers use higher frequency of material process in comparison to other process types with *Dawn* leading by a margin

of 3.4%. This proportion of materials processes is same as found by Qoriah (2018). Same is the case with relational processes where Dawn leads by a margin of 1.8%. On the other hands, The News International uses verbal and mental processes more than Dawn newspaper, with a total of 13% and 6.6% respectively. The number of existential processes showed little difference in both newspapers, with only occurring once or twice out of 135 clauses showing inevitability of crisis.

Newspaper	Material	Mental	Relational	Verbal	Existential	Total
Dawn	71	6	43	13	2	135
The News	66	9	41	18	1	135

Table 10. Frequency of process types in Dawn and The News

Participants in ideational metafunctions positionalize the roles performed by different agents and construct a narrative of scarcity and conflict. This analysis helps in examining the time, cause, and extent, which leads to contextualizing events by creating a link between governmental bodies, public, and water crisis.

4.2.1. Material Processes

Both *Dawn* and *The News* rely heavily on Material processes to depict the water crisis as an unfolding chain of concrete actions and consequences, but the two newspapers differ in how they construct agency and responsibility.

Newspaper	Process Type	Participants	Examples from Text
Dawn	Material (placed)	Actor: A UN report Goal: Pakistan	A UN report... had placed Pakistan...
	Material (impede)	Actor: political instability Goal: water sector reforms	political instability... continue to impede water sector reforms
	Material (prepare)	Actor: We Goal: impacts	we must urgently prepare ourselves for the... impacts...
	Material	Actor: Sindh	Sindh is facing a 50pc water shortage

Liberal Journal of Language & Literature Review

Print ISSN: 3006-5887

Online ISSN: 3006-5895

	(facing)	Goal:	water shortage	
	Material (taken over)	Actor: profiteers	and profiteers have gradually taken over the provision...	
		Goal:	the over the provision... provision	
The News	Material (floated up)	Actor: simmering political lines...	The simmering political fault lines... have floated right up	
	Material (failed to resolve)	Actor: federal government	the if the federal government failed to resolve the matter	
		Goal:	the matter	
	Material (fueled)	Actor: one that (issue)	one that has fueled nationalist movements	
		Goal:	nationalist movements	
	Material (improve)	Actor: Public awareness campaigns	Public awareness campaigns... could significantly improve water management	
		Goal:	water conservation	
	Material: (look for)	Actor: people	people look for alternatives	
		Goal:	alternatives	

Table 11. Material Processes Examples in Dawn and The News

Dawn consistently assigns clear, identifiable Actors such as *UN reports*, *political instability*, *we*, *Sindh*, or *profiteers*, which creates a sense of direct accountability. These processes—*placed*, *impede*, *prepare*, *facing*, *taken over*—frame the crisis as the

outcome of institutional failures, human actions, and governance gaps, emphasizing structural causes and the need for proactive management. The recurrent use of human or institutional Actors reflects an editorial stance that foregrounds responsibility and the urgency of corrective action.

The News, on the other hand, frequently emphasises situational or systemic events rather than overt human agency. Instead of placing direct responsibility, actors *like political fault lines, the concerning situation, or public awareness efforts* highlight the causes and circumstances producing the problem. Processes like "*floated up*," "*fuelled*," and "*improve*" depict dynamic movement and growing tensions, but they typically describe events as emerging phenomena rather than intentional institutional failings. Human agents are portrayed as reactive, reacting to circumstances rather than promoting change, even when they do appear, such as when people search for alternatives.

4.2.2. Relational Processes

Both *Dawn* and *The News* make extensive use of Relational processes to classify, describe, and evaluate the state of Pakistan's water crisis. However, they differ in how they frame responsibility, severity, and the nature of the problem.

Newspaper	Process Type	Participants	Examples from Text
Dawn	Relational: Attributive (is)	Carrier: water regulator IRSA Attribute: hopeful	water regulator IRSA is hopeful
	Relational: Inceptive (get)	Carrier: the factors... Attribute: worse	As the factors... are likely to get worse
	Relational: Attributive (become)	Carrier: growing water shortages... Attribute: the 'new normal'	since growing water shortages... have become the 'new normal'..
	Relational: Attributive (is)	Carrier: a country like Pakistan Attribute: prone	when a country like Pakistan is prone to multiple... events...

Liberal Journal of Language & Literature Review

Print ISSN: 3006-5887

Online ISSN: 3006-5895

		to multiple...
		events
	Relational	Carrier: and Pakistan's future water
	Attributive	Pakistan's future outlook grows even more
	(grows/becomes)	water outlook precarious
		Attribute: even
		more precarious
The News	Relational	Possessor: Any Any dip... could have a huge
	Possessive	dip in agricultural impact
	(have)	output
		Possessed: a huge
		impact
	Relational	Carrier: the the country's two major water
	Attributive (are)	country's two reservoirs are still not available
		major water
		reservoirs
		Attribute: still not
		available
	Relational	Carrier: Water Water distribution... is a
	Attributive (is)	distribution disputed issue
		across the
		country
		Attribute: a
		disputed issue
	Relational	Carrier: water In Karachi, water shortages
	Attributive (are)	shortage are a norm
		Attribute: a norm
	Relational	Token: The The government's response...
	Identifying (has	government's has been silence
	been)	response to this
		Value: silence

Relational Attributive (are)	Carrier: Greater transparency... and improved infrastructure... Greater transparency... and improved also essential infrastructure. Attribute: essential
Relational Identifying (is)	Token: The main offending issue... is the federal government's plan for Sindh Value: the federal government's plan [[to construct...]]

Table 12. Relational Processes Examples in Dawn and The News

Dawn predominantly employs Attributive relational processes (e.g., *is hopeful*, *are likely to get worse*, *have become the "new normal"*). These constructions assign qualities, conditions, and tendencies to entities such as *water regulator IRSA*, *growing water shortages*, and *Pakistan's future water outlook*. The attributes frequently signal escalation and inevitability ("even more precarious", "new normal"), which constructs the crisis as a deepening structural condition. Dawn's frequent use of relational processes to characterize national vulnerability places the issue as systemic and long-term, requiring strategic intervention. This creates a discourse of danger, warning and structural urgency.

Contrastingly, *The News* employs a combination of Attributive, Possessive, and Identifying relational processes, but with a more predictive and evaluative orientation. Possessive clauses such as *Any dip... could have a huge impact* illuminate the economic effects of water shortages. Attributive relations like *water shortages are a norm* and *water distribution... is a disputed issue* define the crisis through institutional dysfunction and routine scarcity, emphasizing governance failures. The Identifying relational process "*The government's response... has been silence*" directly assigns institutional blame, making the actor explicit in ways Dawn rarely

does.

4.2.3. Verbal Processes

Both newspapers use Verbal processes to foreground voices and institutional stances within the water crisis discourse, but they differ significantly in who speaks, who is silenced, and what kinds of messages are circulated. These differences shape each paper's ideological positioning.

Newspaper	Process Type	Participants	Examples from Text
Dawn	Verbal (promising)	Sayer: [ellipsed KWSC] Verbiage: to resume supply	(Dependent) despite initially promising to resume supply...
	Verbal (ordered)	Sayer: He (Lahore High Court judge) Receiver: the urban planners	He has ordered the urban planners
	Verbal (warn)	Sayer: Experts	Experts warn
	Verbal (serve to remind)	Sayer: World Water Day Receiver: the country's rulers	World Water Day should serve to remind...
	Verbal (has warned)	Sayer: THE Indus River System Authority Receiver: Punjab and Sindh...	THE Indus River System Authority has warned Punjab and Sindh...
	Verbal (has told)	Sayer: the water regulator Receiver: the provinces	the water regulator has told the provinces

Liberal Journal of Language & Literature Review

Print ISSN: 3006-5887

Online ISSN: 3006-5895

The News	Verbal (says)	Sayer: Indus River Authority (IRSA) Receiver: Pakistan	Indus River Authority says (IRSA)
	Verbal (says)	Sayer: An official of the Sindh irrigation department Receiver: Pakistan	An official... also says
	Verbal (ask for)	Sayer: privately run water tankers Verbiage: whatever prices	As privately run water tankers ask for whatever prices
	Verbal (condemned)	Sayer: the Sindh High Court Bar Association (SHCBA) Target: Irsa's approval	the Sindh High Court Bar Association (SHCBA) has strongly condemned Irsa's approval
	Verbal (demanded)	Sayer: [ellipsed SHCBA] Verbiage: an immediate withdrawal of all such canal projects	and [has] demanded an immediate withdrawal...
	Verbal (called for)	Sayer: Pakistan Target: global action	Pakistan has called for global action
	Verbal (assured)	Sayer: Adviser... Rana Sanaullah	Adviser... Rana Sanaullah had assured Sindh Senior Minister

	Receiver:	Sindh	Sharjeel Memon
	Senior	Minister	
	Sharjeel Memon		
Verbal	Sayer:	The PPP	The PPP is reported to have
(reported/raised)	Verbiage:	the	initially raised the issue
	issue		

Table 13. Verbal Processes Examples in Dawn and The News

In *Dawn*, Verbal processes often highlight institutional caution, expert warnings, and reminders to the state. The Sayers include *experts*, *the water regulator*, *IRSA*, and symbolic entities like *World Water Day*. The verbs (warn, remind, tell, ordered) emphasize alerts, guidance, and accountability pressure. Dawn uses these processes to construct the crisis as something repeatedly communicated to the authorities, yet still inadequately addressed. Institutional distance is created through ellipsis (e.g., “despite initially promising...”), implying bureaucratic inefficiency without directly naming actors.

Generally, Dawn’s verbal choices form a discourse where expert authority and institutional warnings are central, stressing the idea that the state has long been informed but insufficiently responsive. In comparison to this, *The News* uses Verbal processes to foreground disagreement, confrontation, and political conflict. Choice of sayers indicate a much more politically crowded landscape of voices. The verbs such as condemned, demanded, assured, raised the issue, ask for indicate activism, opposition, and political pressure. *The News* magnify direct criticism and formal objection, particularly through SHCBA and PPP, portraying the crisis as deeply rooted in institutional disagreements and political struggle. The narrative is more confrontational and politically charged than Dawn’s because of the heavy presence of conflict-driven verbal processes.

4.2.4. Mental Processes

Mental processes reveal how each newspaper constructs *ways of thinking, perceiving, and experiencing* the water crisis. The patterns show clear ideological differences in how responsibility, awareness, and perception are framed.

Liberal Journal of Language & Literature Review

Print ISSN: 3006-5887

Online ISSN: 3006-5895

Newspaper	Process Type	Participants	Examples from Text
Dawn	Mental Cognition (know)	Senser: we Phenomenon: the worth of water	we know the worth of water
	Mental Cognition (found)	Senser: Desperate residents Phenomenon: themselves [being] forced...	Desperate residents have found themselves...
	Mental Cognition (experiencing)	Senser: we Phenomenon: post-climate change conditions	that we are already experiencing post-climate change conditions
	Mental Cognition (seeing)	Senser: [ellipsed parties] Phenomenon: it [as] a direct threat to Sindh's... water supply	(Non-finite) seeing it as a direct threat...
The News	Mental Cognition (ignores)	Senser: this reading Phenomenon: the historical context and political realities	(Main) this reading ignores the historical context...
	Mental Cognition (Recognising)	Senser: [ellipsed Pakistan] Phenomenon: the urgency of the issue	(Non-finite) Recognising the urgency of the issue
	Mental Cognition (figured out)	Senser: people Phenomenon: a way	people have figured out a way
	Mental Cognition	Senser: Financially Phenomenon: (Main) Financially weak	Financially weak

Perception (finds)	weak Pakistan Phenomenon: entangled in another web...	Pakistan... now finds itself entangled...
-----------------------	--	--

Table 14. Mental Processes Examples in Dawn and The News

In *Dawn*, Mental processes centre on collective awareness, lived experience, and public realization. The Sensors are mainly “we”, *residents*, and the wider population, signalling a shared consciousness of the crisis. Verbs such as *know*, *found*, *experiencing* foreground emotional and experiential closeness, presenting the crisis as something directly affecting ordinary people. *Dawn* emphasizes that citizens already *understand*, *feel*, and *live through* climate-induced water insecurity. This choice constructs a narrative of public awareness being high, implying that authorities must respond to needs already well-understood by the population.

The News uses Mental processes to foreground political perception, ideological framing, and cognitive misalignment. Sensors include *political parties* (*ellipsed*), “*this reading*”, *Pakistan* (*ellipsed*), *people*, and *the state*. Verbs like *seeing*, *ignores*, *recognizing*, *finds* show conflicting interpretations and political judgments. Mental processes often expose conceptual differences such as Sindh seeing the project as a threat, or certain readings “ignoring” political realities. *The News* portrays the crisis as not only material, but also deeply *discursive and political* through the use of cognition, conflict of perspectives, and strategic calculation.

4.2.5. Existential Processes

Existential processes work to bring phenomena into existence in discourse. These processes signal *what* is present, absent, emerging, *or* threatening. The patterns in *Dawn* and *The News* show differences in how each paper builds the *urgency and nature* of the water crisis.

Newspaper	Process Type	Participants	Examples from Text
Dawn	Existential (is)	Existent no water [[to be had]]	IN large parts of Karachi, there is no water...

	Existential (is)	Existent: likelihood	a	There is a likelihood
The News	Existential (are)	Existent: some discrepancies in data		Although there are some discrepancies in data

Table 15. Existential Processes Examples in Dawn and The News

Dawn emphasizes absolute scarcity and looming threats through the use of existential processes. Expressions such as “*there is no water*” and “*there is a likelihood*” foreground conditions of absolute shortage and probability of future danger. By presenting deficiency as *already existing* and unavoidable, Dawn places the crisis as immediate, visible, and undeniable. The existential structure frames water scarcity as a material reality, not a political claim. This reinforces a narrative of urgency and points out the *severity* of conditions on the ground.

The News uses existential processes rarely to highlight administrative or informational issues rather than physical or total absence. For example, “*there are some discrepancies in data*” draws attention to institutional inconsistency instead of material scarcity. This places the crisis within an administrative and governance framework, suggesting that part of the problem lies in flawed data, bureaucratic gaps, or questionable information. *The News*, unlike *Dawn*, does not highlight physical absence but rather the presence of disagreement, confusion, or structural disorder.

Conclusion

The fused analysis of ideational and textual metafunctions demonstrates that *Dawn* and *The News* construct opposing ideological positions in their reporting on Pakistan’s water crisis. Textually, *Dawn’s* preference for unmarked topical themes and straightforward thematic progression supports a discourse of unbiasedness and factual reporting. *The News*, meanwhile, uses more marked themes that foreground evaluative stances and highlight conflict or urgency. Conclusively, while both newspapers use marked Themes to structure discourse and foreground key information, *Dawn* leans toward critical and systemic contexts, whereas *The News* features political, institutional, and situational contexts. These results substantiate the

applicability of Systemic Functional Linguistics (SFL) as a powerful analytical tool in revealing the manner in which language constructions and mediations of social reality are created in media discourses. The analysis of the experiential, interpersonal, and textual metafunctions of news reporting showed that grammatical and thematic decisions are not neutral but are used to influence the views of the readers concerning economic and environmental problems.

Limitations

The current study offers valuable insights into the textual and ideational metafunctions; however, the sample selected for analysis is small and purposive. It only focuses on editorials of two English newspapers that limit its generalizability to a broader media context. Moreover, the editorials are selected from a specific time frame which may not account for the variation in discourse over time. Further studies are required incorporating multiple newspapers from different timeframes for a better understanding and generalizability of the findings.

Recommendations

A last recommendation of the study is that future studies should extend this line of investigation with multimodal SFL studies of how newspapers include visual and graphical elements, or by using comparative regional studies to find out how linguistic framing can be different across the South Asian media contexts. These extensions would give a better insight into the way language still influences social consciousness, policy discussions, and communal reaction to national disasters.

Second, the findings indicate that media discourse is actively involved in the development of the shared meaning of national crises. The material processes are frequently used in Dawn that may lead the readers to believe in the power of solutions provided by the state, creating confidence in the mechanisms of institutions. Contrary, the mental and relationship processes of The News provoke civic scrutiny and emotion, which might drive civic awareness and increase distrust in the government. Both of the newspapers, using different linguistic resources, are part of the social semiotics of the Pakistani developmental discourse in 2025.

Ethical Considerations

The research involves no human participants as the newspaper's data is publicly

available, and hence no formal ethical approval was needed. Ethical rigor was, however, observed through proper citation of data sources, use of proper textual content, and objective presentation of results without the use of any ideology.

References

- Brewing water issue. (2025, March 7). *The News International*.
<https://www.thenews.com.pk/print/1289372-brewing-water-issue>
- Contentious canals. (2025, April 23). *The News International*.
<https://www.thenews.com.pk/print/1304137-contentious-canals>
- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). Thousand Oaks, CA: Sage.
- Eggins, S. (2004). *An introduction to systemic functional linguistics* (2nd ed.). London, UK: Continuum.
- Fairclough, N. (2010). *Critical discourse analysis: The critical study of language* (2nd ed.). London, UK: Routledge.
- Fatima, S., Parveen, M., & Qasim, H. M. (2024). Nominalization in Pakistani English News Articles: A Systemic Functional Linguistic Perspective. *Annals of Human and Social Sciences*, 5(4), 696–704. [https://doi.org/10.35484/ahss.2024\(5-IV\)65](https://doi.org/10.35484/ahss.2024(5-IV)65)
- Going dry. (2025, April 7). *Dawn*. <https://www.dawn.com/news/1902598>
- Habib, A., & Zahra, F. T. (2024). Eco-Linguistic Analysis of Flood Representations in Selected Print Media: A Case of Climate Change Semiotics. *Pakistan Languages and Humanities Review*, 8(2), 240–251. [https://doi.org/10.47205/plhr.2024\(8-II\)21](https://doi.org/10.47205/plhr.2024(8-II)21)
- Halliday, M. A. K. (1994). *An introduction to functional grammar* (2nd ed.). London: Edward Arnold.
- Naveed, H., Yasmin, M., & Irshad, I. (2025). Exploring Gender Neutrality in Pakistani Newspapers a Critical Discourse Study. *Pakistan Social Sciences Review*, 9(3), 775–787. [https://doi.org/10.35484/pssr.2025\(9-III\)59](https://doi.org/10.35484/pssr.2025(9-III)59)
- Qoriah, D. (2018). Ideational meaning of HIV aids slogans: A systemic functional linguistic study. *English Education and Applied Linguistics Journal*, 1(1), 82-91.
- Running on empty. (2025, March 10). *Dawn*. <https://www.dawn.com/news/1899558>
- Running out of water. (2024, August 8). *The News International*.
<https://www.thenews.com.pk/print/1217585-running-out-of-water>

Liberal Journal of Language & Literature Review

Print ISSN: 3006-5887

Online ISSN: 3006-5895

Running dry. (2025, March 10). *The News International*.

<https://www.thenews.com.pk/print/1290268-running-dry>

Salahuddin, S. (2024). Understanding Media Framing of political landscape and Audience Perception: A case of Pakistani Politics. *Journal of Social Sciences, Humanities and Innovation*, 4, 1-18.

Saleem, M., Khan, J. & Faraz, H. (2025). Identity and Conviction Stories in Discourse on Natural Disasters. *Qlantic Journal of Social Sciences and Humanities*, 6(3), 112-121. <https://doi.org/10.55737/qjssh.vi-iii.25395>

Water crisis. (2025, May 13). *Dawn*. <https://www.dawn.com/news/1910705>

Water crisis. (2024, April 8). *Dawn*. <https://www.dawn.com/news/1826365>

Water scarcity. (2025, March 10). *Dawn*. <https://www.dawn.com/news/1896972>

Where's our water? (2024, April 8). *The News International*.

<https://www.thenews.com.pk/print/1176633-where-s-our-water>