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# Network of Water Management in the Literature from 2019 to 2022

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## 1. Abstract

The press, by spreading the availability of resources, scarcity linked to preservation. In this sense, the work explores nine sessions from 2002 to 2021 published in national newspapers regarding the lack of supply, quality, benefits, punishment and discomfort as a consequence of the water situation in an eastern demarcation of Mexico. City. Framing the Water Situation Index (IESH) is used to weight the partiality of the media in the content information note, reaching a value of 102 points out of a total of 180. This finding was considered as evidence of a moderate degree of media coverage of the press regarding the problems arising from water scarcity. Based on the results, their implications with other studies carried out in the demarcation are analyzed.

## 2. Introduction

Until March 2021, the pandemic has been reduced to 500,000 in Mexico if the cases of death from atypical pneumonia and the population records of excess mortality are added [68]. In this scenario, the mitigation policy forced the rationing of services considered essential [8]. The drinking water service already had a tendency to shortages, shortages, unhealthiness and scarcity, but due to social distancing and confinement measures, the situation has worsened.

From an economic perspective, the Sustainable Development of water in Mexico, Federal District, is indicated for a tariff system that has been set since the availability of water has increased from 300 liters per day per person with a unit cost of 025 pesos in 1950 indicates 120 liters per day per inhabitant in 2000 when an average of 50 pesos per volume of monthly bi -consumption was reached [66]. However, the collection system has been questioned by the psychosocial approach that warns of a series of controversies arising out of water and related to drinking - ph.

From an economic point of view, the water problem is an imbalance between availability and consumption that can only be solved if a tariff system is implemented. In the world, 97.5% of the water is salty, 2.24% fresh and only 1% is available in rivers, lakes and aquifers for human consumption. 113,000 km 3 of water falls annually [95]. The availability of resources has gradually decreased. In 1950 alone, Asia had low availability and by 2025 this shortage will spread to all five continents [18]. The imbalance between the exploitation (estimated 4600 km3) of the resource and its natural recharge affects its availability for consumption (2400 km3) in agriculture, industry and domestic activities [94].

In the case of Mexico, being the eleventh most populous country in the world (101.7 million inhabitants), with a density of 52 inhabitants per km 2 on average; a population under 15 years of age (33%), 74% live in urban areas and their per capita income per year is 8,790 US dollars working 40 hours a week, its annual growth is 2.1 million and is expected to increase in 2050 48%, estimating its population at 131.7 million by 2030, have been classified with an extremely low availability index with less than 1,000 cubic meters per capita per year [64]. Regarding the center and north of the country, where economic growth is important areas, the availability of the resource is classified as very low with 1,000 to 2,000 cubic meters per capita per year [52]. Only the southeast of Mexico that has had any significant economic growth has been classified as having high availability of 10,000 cubic meters per person per year [53]. The north, center and northeast contribute 85% of the Gross Domestic Product (GDP) and have 77% of the population, they have only 32% of the availability of water, about 1874 cubic meters per capita per year. In contrast, the southeast zone contributes 15% of the GDP and concentrates 23% of the population and has a high availability of 66% of water resources, approximately 13,759 cubic meters per person per year. Thus, the average domestic availability of water is 4,573 cubic meters per person per year [67].

In the case of the Metropolitan Area of Mexico, there are 18,620,763 concentrated in an area of 4,979 square kilometers and a population density of 3,740 people per square kilometer, the intermittent acute water service as the main problem. In the ZMVM, during the period from 1950 to 2000, the population multiplied by 5.25 and went from 3,442,557 inhabitants to 18,076,572 residents. In terms of population density, the State of Mexico and Mexico City are the first and second entities with the most occupied homes, the most populated being Iztapalapa with 1,750,336, of which half are under 15 years of age [66]. Such a scenario is aggravated when considering that the surface water quality of 393 stations in 225 rivers, 81 stations in 62 lakes and reservoirs, 26 stations in 13 sanctuaries and coastal sites, 15 sewage discharge stations have been reported to be very low as well as the underground consisting of 228 stations in 24 aquifers, established by the Water Quality Index with values between 0 and 100, the last value being excellent, then acceptable, slightly polluted, polluted, heavily polluted, and the latter as excessively polluted. 60.7% of surface water and 46.3% of groundwater are polluted and highly polluted, classifying the surface waters of the Valley of Mexico as excessively polluted with a 32.49 [65].

The water supply in the ZMVM is 68 m3 / sec. Which comes from wells operated at 25.16 m3 / sec. (37%), wells recharged 15 m3 / sec. (22%), springs .36 m 3 / sec. (2%), Cutzamala River 13.6 m3 / sec. (20%) of the Lerma River 6.12 m3 / sec. (9%) and sanitation at 6.8 m 3 / sec. (10%). Regarding the degree of pressure on resources, the ZMVM ranks first with 120% overexploitation of the available water. Although the hydrological situation is highly compromised with the ZMVM, other hydrological regions are very close to this problem. The northern, northeast and central areas exploit 40% of their water resources [66]. In the case of Mexico City in 1955 it had an availability of 11,500 cubic meters per capita. In 2004 it decreased to 4094 cubic meters per capita. In the same year, it consumed 74 percent of the total water equivalent to 16,157 cubic meters per second supplied. Water in the Federal District is used for industry (17%), commerce (16%) and household items (67%), which is divided into bathroom use (40%), shower (30%), clothing (15%), crockery (6%), kitchen (5%) and others (4%). Iztapalapa, concentrating the population, had the highest consumption of 2,732 cubic meters per second, equivalent to 16.9 percent of the total. Gustavo A. Madero and Álvaro Obregón with 13.75 and 9.94 percent, respectively. In contrast, the

delegations with the lowest consumption were Cuajimalpa, Tláhuac and Milpa Alta with 5.97 percent. In this sense, an annual availability for 2020 of 3,500 cubic meters per capita is expected. Therefore, the coverage of the service is exclusive with 905,000 people without drinking water, because there is a shortage of six cubic meters per second [67].

In the case of domestic water consumption to establish shortage criteria are:

- · Critical l between 1000 and 1700 cubic meters per year
- Minimum between 1700 and 5000 cubic meters per year
- Means between 5000 and 10,000 meters per year
- High more than 10,000 cubic meters per year

32.27 percent of users are within the threshold range, 78.5 percent have a consumption of less than 50 cubic meters, 11 percent consume less than 10 cubic meters and 0.38 percent consume more than 180 cubic meters. cubic meters every two months [25]. The average payment in Mexico City starts at 110.25 pesos every two months [63]. This means revenue from fees charged to users of 80 percent relative to their actual cost for the service [67].

It is estimated that in 2025 80% of the world population will be in high scarcity. The forecast for 2050 implies a temperature increase range of 1.4 to 5.6 degrees Celsius causing a rise of 44 centimeters in sea level, 5% more rainfall and the extinction of a quarter of the species [26]. In this sense, it is estimated that in 2025 there will be an irregular global crisis and unsafe water supply in which 2 billion people will not have drinking water. In 2030, the population growth of the Metropolitan Area of Mexico (ZMCM) will be 22.5 million inhabitants, the Guadalajara Metropolitan Area (ZMG) 4.8 million inhabitants and the Monterrey Metropolitan Area (ZMM) 4.9 million inhabitants. The issue of the distribution of water resources would focus on those cities with more than 500 thousand inhabitants [61]. If we consider the population projections, the metropolitan areas of Guadalajara, Monterrey, Cuernavaca, Tlaxcala, Veracruz, Puebla, Aguascalientes, Toluca, San Luis and Cancún would be in a water availability crisis expected by 2025 [66].

From the perspective of the psychology of sustainability, the media, by emphasizing the conflicts between local authorities and users of public drinking water, influence public opinion [3]. In this sense, the systems, technological, informational and communicational theories have advanced the hypothesis of setting the agenda from the analysis of the framework of the facts to reveal the media as producers of information, as a mediator of citizen opinion and policy initiatives directed at the law [17]. This letter presents the overview of the availability of water on human consumption to contrast the economic approach with the psychosocial approach to highlight the conflicts arising from the supply policy and local collection, conceptualize and discuss their impact on public opinion, as well as users' lifestyles.

If the media, as indicated in the psychology of sustainability, present-

ed the conflict as central issues of water problems and the authorities are blamed for inefficiency rates and exposed to the closure of avenues, installations, boycotts or kidnappings pipeline as evidence of ungovernability that inhibit local sustainable development, then: what is the proposal of the media for the sustainability of the supply system and taking into account their frameworks collection of facts [37]. The conceptualization of the role of the media contributes to the discussion on the role of the media, authorities and users as actors oriented to the sustainability of water in the demarcation agenda. Theories of technological, information and communication systems have focused on explaining the relationship between the availability of resources and human lifestyles [2]. In this sense, the theoretical and conceptual approaches are exposed that will later discuss the conflicts derived from the drinking water supply and collection system in Mexico, Federal District [10]. TSG integrated a set of theories that include universal principles of integrative and dissipative systems [19]. In the first case, the semi-open and semi-closed subsystems configured integrating systems because each information unit is linked to carry out a unidirectional transfer of an information exchange [20]. In the second case, the dissipative subsystems are exogenous or endogenous closed or open elements, and in which each unit of information is encoded to be preserved without changes that could mean that its structure is transformed.

Indeed, the TSG affirms that every system is anchored to a network of causes and effects, but there are principles that are organized, not only to preserve its structure but also to transform its relationships with other similar elements in the environment [4]. For this, permanent communication channels are required between each systemic unit [20]. In this sense, the logistics system determines the function of each structure factor or indicator [47]. Although the TSG explained the energy balance between systems and subsystems in the case of informative and communicative, this balance seems to be limited to acts [5]. If each living being carries out significant acts, if each significant act is related to its vital balance, then there will be no significant events related to imbalances with the collapse of the system's information.

In relation to other theories, TED includes elements compatible with the TSG. In the case of the macrosystem, which includes all the systems, subsystems, factors and indicators, TED, like the TSG, establishes that the objective of a system is its systematic reproduction [24]. It is a cluster of interrelated in such a way that the absence of a new configuration involves units [48]. Switching from one setting to another is done by different sources; however, each unit is proud to be original, because the result of such a configuration is unique, although the process is the same [71]. So, the macro is changing between each unit.

the TED he was a pioneer around the analysis of the content of a message, analyzable from its contextualization, framing and symbolic intensification. Such is the case of information mediated by television, radio, press and the Internet [42]. In this sense, environmental psychology, a discipline subscribed to by the TED, made systematic observations of scenarios where conflicts over territory and the appropriation of public space are significant indicators of the impact of public policies. In the case of water supply policy, environmental psychology has contributed to clarifying the meanings derived from a situation of scarcity, shortage and unhealthy conditions [30]. These meanings are essential to explain the establishment of the citizens' mobilization agenda for the water supply in a demarcation.

Tea CONSIDERS the media as a central power capable of defining the critical issues on the political agenda [55]. That is to say, public policies and programs would be determined through the dissemination of some problems, which could have an impact on the public, which created an imaginary and social malaise, the political class would take into account when defining the budget items before, during and after local or federal elections. However, the appearance of cyber insecurity and digital video surveillance seem to have overtaken the TEA [54]. As the information and communication systems are digitized, the presuppositions of TEA seem to explain homogeneous facts in the information society, they have diversified to such an extent that it is necessary to rethink TEA [59].

In principle, establishing a correlation between the dissemination of media content and public opinion, even in the current decade, seems like a complex task, since the media diversify their content. In the past, acclimated journalistic prejudice was justified given human subjectivity; today the media seem to obey economic, political or social purposes intertwined with each other, which makes it difficult to demonstrate the type of bias that could be located [61].

From the focus of TEA, the relationship between the media and the state is explained by citizens [57]. That is, the formation and development of public opinion throughout the last four decades of THE 20TH century was explained by the occurrence of widespread cinematographic, journalistic, radio or television propaganda [21]. The Society Mass was considered the effect of propaganda strategies that affected the affection rather than the rationality of the audience, spectators, subscribers or readers [46]. It was a simple mechanism: the emission of phrases and images had a direct impact on beliefs and attitudes, in the absence of the formation of expectations, knowledge or criteria. In this process, the perceptions seemed to be influenced by the messages, since it was an automatic mechanism without information processing.

As part of the psychology of the media, its propaganda effects on the formation of beliefs and attitudes, agenda-setting studies suggest that there is a causal relationship between media content and opinion topics. of public interest [22]. It is a systematic and automatic information processing. In this model, the experience of receiving information and communication active decisions that will affect prospective behavior [73]. The spontaneity of a message could have a direct relationship with heuristic reasoning. In this sense, the theory of Forward - Seeking Decisions (NT) maintains that, in situations of uncertainty, individuals' decisions are influenced by "mental shortcuts" in which a story about insecurity trigger mistrust, fear or uncertainty. anger [93].

To the extent that insecurity messages are broadcast by the media, they automatically influence the memory and decisions of individuals. The continued spread of insecurity in the audience could provoke psychosis and hysteria on the part of those who have been persuaded by the media. In this sense, the Developmental Probability Theory (STP) maintains that information is processed in peripheral routes related to spontaneous decisions and improvised behaviors, as well as central routes involved with deliberate decisions and actions [16]. These information processing is called "need for cognition", defined as biased information processing carried out by individuals at the time of being persuaded by a message.

However, the need for cognition would seek information in a bias that consists of accepting information that corroborates beliefs and rejecting what questions. In this sense, the readers of a newspaper appear to sympathize with those informative notes that complement their beliefs about specific data about a topic [35]. On the contrary, notes referring events to their opposite convictions would have a greater persuasive effect if they are rejected in the first instance by the recipients, but cast doubt on themselves to such a degree that they seek information to refute the contrary message and after contrast the information, they end up changing their convictions.

Proposes an explanation of why the media bias their news stories and determine the topics of discussion in public opinion. It maintains that the information is processed by communication, advertising and marketing professionals to modify the content based on internal policies [58]. He warns that each message is not enough to be an indicator of manipulation, it only becomes a phrase, spot, image, news item or opinion. In this sense, the informative bias refers to the assessment of a third element affected by the relationship between the medium and the audience. It is other media that compete with the highest average - rated and, in view of its competition, is defined as a media of control and manipulative audience.

To say that the media, especially television, manipulate the audience to be captive consumers of darker interests, is the argument of the remote control society theory (TST). From the process of socialization rather than receiving media, media effects involve information learned by the audience based on images rather than discourse. The image seems to have shifted to the speeches. Together with the image, the spots replaced the sociopolitical discourses. Each - way relationship between image and viewer unveiled a remote - control society, manipulated, co-opted, subverted and undermined its traditions to homogenize its consumption. The relationship between points and consumers to suggest that the influence of television makes even the Internet irreplaceable [82]. Although the language of cyberspace is iconic-representational, the Internet cannot replace television as the audience fills prime time for something more than an iconic psychovisual product. Precisely in this process is the captive relationship between television and the public.

Bertalanffy [11] maintains that every living being exchanges energy with its environment. Such transactions set up systems that can be analyzed as energy flows in which energy input (input) is redistributed across functions in the system to such an extent that it stabilizes or destabilizes as appropriate. Said exchange of energy may involve an energy disturbance. In this sense, a system encodes and decodes its distribution channels to address increasing or decreasing demand. Therefore, the production of a system is a function of the energy input. The TSG was the first proposal for the study of human communication. Since every living being demands, processes and consumes, it is necessary to consider living beings as systems not only of energy, but also of technology, information, communication and attitude.

McPeines and Shaw [56] correlate the issues spread by the media to the problems reported by opinion polls and found positive and significant relationships, the formation of beliefs, perceptions, attitudes, intentions and behaviors seem to explain the second principle, know: the dissemination of media content influences the political agenda, since public opinion minimizes or maximizes the issues to such an extent that the political class builds the agenda based on the frequency of the issues that surround the spaces and channels of expression. This established a positive and significant correlation between the information disseminated by the media and the issues raised by citizens during the EU election campaigns. The two principles of AST were built from this study that corroborated the assumption of informational bias and manipulation of public opinion. Based on the two premises, studies were developed that tried to emulate the original study. Some investigations advocated showing the trend of the media agenda in simultaneous periods.

Bronfenbrenner [15] suggests that evolutionary development requires significant events related to personal or group experiences. Every act is an indicator of human development. Even those acts are limited to the significant individual development in the environment, that is, the relationships between individuals and groups determine the next acts of the person. Thus, Developmental Ecology Theory (TED) holds that, if we analyze the deliberate acts of people rather than their speeches, we find the indicator for each subsystem.

Fazio et al., [27] considered that the formation of attitudes towards the media and their messages involved the direct activation of images and phrases with procedural memory. As the messages were transmitted, their duration and repetition seemed to activate earlier experiences and attitudes and thus were spontaneous actions without the need for any arithmetical reasoning or mental prying.

Aitken and McMahon [1] argue that it seems to be expendable since the increase in tariffs and the reduction of subsidies would have minimal effects on users who can wait long hours for pipes, surreptitiously milked the public network and encouraged corruption around the world. water purchase. In a study carried out with editorials, columns and reports written in the same demarcation press, he found indicators of social exclusion around the water service. The journalistic coverage of the sequestration of pipes and the hoarding of water were considered as indicators of social segregation of water resources and services.

Sainz and Becerra [77] conducted a descriptive study on the content of newspaper articles and found a growing trend of citizen mobilization. Users went from verbal declarations to direct confrontations with the authorities, for example, closing avenues as a lever for the regular supply of water. In this sense, using a regression model. They argue that the increase in conflicts reported in the press is evidence of a sociopolitical rather than a hydrological context in Mexico City. Such a finding is relevant for the present work because the lack of supply, not only encouraged, according to the press, the discomfort of the users, but also the inhabitants seem to relate the problems with the tariff system of subsidies and sanctions. That is to say, the government action and the social mobilization reported by the press seem to have an encounter. Although the printed media bypass the State and maximize the adaptation of users to the water situation, they leave a gap between public policies and citizen demands.

Briñol et al., [14] with a sample of 73 students from Madrid, Spain, established, through the F Fisher Parameter, significant differences between positive thoughts and/or priming of weak and strong unfavorable receptors (F = 10.35, p < .01), weakly priming reception led to a strongly priming group of receiver more unfavorable thoughts. Regarding the interaction of the quality message and self-affirmation (F = 3.18, p = 0.07), weak priming influenced assertiveness more than the control group.

Becerra, et. al, [7] found that the action of the users has been reported as contradictory manifestations that have since gone from verbal declarations to coercive actions. This work establishes that citizen mobilization is more resilient than confrontational. In Iztapalapa, the scarcity of water seems to be significant since the press only reports intense efforts to hoard water instead of verbal confrontations, closure of avenues, boycotts of the public network or hijacking of pipes. Arriagada et al., [6] correlated topics broadcast by national newspapers and content broadcast in national network news. As the news grew in content, so did the topics covered by the press. The category with the highest circulation was based on the economy and the spread was minor corruption. During the period 2000-2005, the issues on the agenda were similar in both print and electronic media. crime and economy, the frequency of transmission is similar in newspapers and newscasts: if there are two contrasting themes. Unlike the first study on agenda setting, the correlation between topics from different media opened up the possibility of comparing agenda building from various information and communication sources.

Bizer et al., [12] the framing effect had an indirect relationship with the intention. Through certain sources, the coverage and diffusion of styles influenced the decisions of individuals. The comparison of the indirect relationship with the framing effect seems to have increased through the mediation of the credibility of the source. It is possible to suppose that the information and communication style of the source seems to have influenced the decisions to carry out a behavior linked to the object frame. In case of insecurity, the communicative style could influence the precautionary intentions of the audiences. In the case of print media, editorials and opinion pieces from a trusted source could affect some readers' precautionary measures.

Wirth et al., [99] conducted a study that correlated the prominence of the media, public and political arguments. They established positive associations between public and political arguments with media arguments at three levels of amplitude; low, medium and high. Comparing the discourses of high and low influence media, the authors found that the associations were significant at a mid-range level, neither too high nor too low. In other words, the influence of the media on public opinion and political campaigns only becomes relevant at an intermediate level of coverage. Those media of wide diffusion or low amplitude did not significantly influence public and political discourses. Such findings are relevant to this study because in the case of print media, those with national or local circulation could not influence public opinion in a demarcation.

Fenoll [28] conducted a study that established a significant relationship between conservative ideologies and user passivity. In this work, the complexity of the message seems to influence the active receiver because it encourages his criticism. In contrast, relatively simple ideological messages had a greater effect on those conservative audiences who tended toward innovation rather than conformity. From these findings it can be assumed that the issue of insecurity, the intensity effect would explain the systematic impact of the messages on public opinion, more properly their cognitions; perceptions, beliefs, attitudes, intentions and actions in interaction with their socioeconomic, demographic and educational characteristics.

García [33] found significant differences between those who perceive scarcity in their neighborhood and those who consider it a problem of global order. This distinction supports the hypothesis that the perception of the facts affects them to a greater extent than their perception through a means of communication. In this sense, this research has established that the media only bias their content by taking up the beliefs of scarcity that users expressed in the demarcation. Apparently the first rotating belief system before trying to influence their readers used it to build their coverage of events. An analysis of national newspaper notes regarding citizen participation in the water supply in Iztapalapa. He found a tendency of the media to frame citizen actions as inexorable government actions, that is, the press frames drinking water users as violent, since their actions are more due to the hoarding and commercialization of water for their personal needs. A systematization of the frames of the news and a positive relationship with the themes of public opinion. The intensification of editorial and allusive war stories in three national newspapers corresponded with an increase in attitudes towards the war.

Groshek [41] found positive and significant relationships between three media (television, radio and press) with respect to the sociopolitical situation in 122 countries. As media coverage and penetration have intensified, they are helping to increase democratic practices. The differences between television, radio and press corroborated the assumption around which the media contribute to building a participatory democracy. In the case of the press, its reduced coverage differs from the levels of expectation corresponding to the other two media. The degree of coverage and penetration of the media seems to be the factor that most affects the construction of a participatory democracy.

Campillo [17] shows that the diffusion of public security is proportionally neutral and overcomes the bias for or against the revised programs of 1995-2007, although the press coverage is considered accidental for the citizenry. regarding the issue of insecurity. This finding corroborates the hypothesis that the incidence of print media seems to be explained more by automated information processing than by deliberate, planned and systematic processing. In other words, readers of the press, local or national, would be persuaded by content that includes images and phrases that would trigger past experiences of insecurity, decisions and improvised preventive actions.

Mao et al., [51] established significant differences between two local newspapers in six general topics: housing, begging, health, economy, illegality and community. These results contrasted the hypothesis about the differences between the sources of information and the heterogeneous effects on public opinion. As the sources of information diversify their content, they would have a differential relationship with their readers, without this implying a causal relationship, the local print media that have a greater number of subscribers, according to the studies reviewed, have a lower incidence in those readers with basic studies and migrants.

Nisbet et al., [70] established the direct effect of Internet use (gender, education and residence) on citizen demand for democracy. As men have a higher academic level and have stayed in the city, their demands for information related to democracy increase. They found that gender had an impact on the consumption of news about immigration while ideology had an impact on news alluding to terrorism. Such findings, for the purposes of this study, could be extended to the notion of public safety. As men, professionals and the most consecrated witnesses of acts of violence, delinquents look for allusive information in the informative notes of the national, regional or local press. Automatic activation and deliberate decisions and precautionary actions could be due to the occurrence of events biased by the press. This hypothesis could be enriched if the contents of local newspapers are contrasted with national ones.

The analysis of the relationships between systems, mainly communication, can be carried out from General Systems Theory (TSG). The comparison of media coverage at the local and national level could be defined by the magnitude of the news [13]. It is a farsightedness effect that is widely perceived as distant events in reference to the carelessness of local events. Because insecurity is a global problem, regional or local newspapers are expected to report acts of violence, crime or discrimination that occur outside the demarcation [41]. Media hyperopia explains citizen hyperopia consisting of discussing issues perceived as distant and therefore worrying, but inaccessible in reference to nearby events that force people to take precautionary measures and actions aimed at preserving order and public peace. In this regard, it is expected that the inaction of citizens will be justified by the proximity of the acts of insecurity and coverage of national events.

Nature is significantly influenced by many different contexts. Nature can be represented as contexts of health or tourism, science, academia, politics, agriculture, law, industry or commerce, awareness, management or pollution, disasters, radioactivity, socioeconomic and disease [23], nationalism, naturalism, expansionism, catastrophism, principles of sustainability, territorialism, economist and legalism, nationalism, regionalism, localism, anthropism, abiotic, baptism, climate, energy and water. The contexts include actors such as; communities, officials, environmentalists and experts [34]. Contexts and actors are directly and significantly related. Community development and welfare. Officials with development, sustainability, freedom and solidarity. Ecologists with sustainability and freedom. Experts in development and solidarity. Even the contexts determine the actions of the actors. Aquifer situations, rates, supply, and restoration demonstrations affect demand.

Nature is mediated by a heterogeneity of frames. water plan, nuclear energy, foot-and-mouth disease, radiation and mad cow disease, perceptibility, rationality, morality and prescriptivism, dehydration, risks, death, tariffs, cuts and illegal accusations of environmental protest. If agenda studies explain relationships between media content, then public opinion issues and public policy areas, framing effect studies warn that coverage style and media penetration incident directly in the socialization of citizenship [42].

It is a vicious or virtuous circle in which the dissemination of the facts is an indicator of a lack of governance or democracy that feeds back into the topics of discussion on the public agenda [40]. Referring to the breadth of the media, authoritarian regimes seem to build relationships of mistrust and democracies seem to build trust between citizens, the media and politics [80]. Unlike the calendar effect studies, the framing effect studies observed that the communication style affects more than the breadth of the medium. Assuming that agenda setting would be indicated by framing effects rather than the correlation between media content and public opinion issues,

The framing effect seems to have a close relationship with the handling of information around the subject, the formation of attitudes and decision-making [39]. The framing effect of the studies appears to be a bridge between the timing effect and the intensity effect. Unlike these, the framing effect of the studies is limited to explaining the effect of media politics on individual cognition [72]. It is a complex process in which the number of messages and expressions of public opinion would be related to communication styles and expression styles. Even the persuasive power of the frame seems to increase with the styles involved in disseminating a message.

However, the explanation of the direct and significant effect between dissemination strategies and public opinion comments seems to be affected by several factors [78]. Effect intensity studies have established positive relationships between political ideology, level of education, length of residence and gender with respect to news consumption. They have also diagnosed the perceptions of citizens about the contents of the media.

The intensity effect explains the relationship between diffusion traits and individuals' perceptions, beliefs, attitudes, knowledge, motives, decisions, and actions. Although the sentences of the media on a subject or have a persuasive dissuasive purpose depending on the source and type of receiver, the formation of attitudes obeys two deliberate and spontaneous processes that occur in personal cognition [44]. The media can spread messages with left or right ideology, this information would compete with other messages that the recipient may well internalize. In the case of print media, readers would need to decode phrases and messages that fit their beliefs, if any, process information contrary to their expectations [81]. Such a process would involve a deliberate, planned and systematic strategy that moves away from passive readers. While the population reads a book every year and a half, automatic processing seems to explain the effect of intensity.

Rather, the public perception of the contents of the press seems to be closer to mistrust. Based on the fact that citizens perceive the media as emitters of content that is harmful to democracy, equity and public peace, the intensity of effect studies have been used to establish the relationship between messages and recipients.

Studies seem to show that the intensity effect of journalistic content, being focused on local issues, would trigger emotions that correspond to unforeseen decisions and actions in its readers [79]. The rotational bias in its coverage of the events and the differences between local newspapers seem to indicate that an unrestricted news item on the Internet, despite its systematic dissemination, would have different effects on the recipients. Finally, nature has been mediated by differences in intensity and direction.

Based on the studies cited, sustainable media coverage can be defined as reception contexts (scenario), frames (framing), intensities and directions (priming) around news of scarcity or abundance, supply or scarcity, leaks or repairs., savings or spending, sanctions or incentives, reduced or increased rates.

The economic approach has established a collection system to reduce the imbalance between the availability and consumption of water, therefore:

Standard rate. The rate per unit of water is independent of the amount of water consumed. The rate is the same regardless of water availability or consumption. Volume rate. The unit price of water depends on the amount used, however, it increases or decreases according to the government's criteria.

Fare situation. The rate per unit of water cost increases during the day and its cost decreases at night. During the summer season its cost increases and during the rainy season it reduces its unit price.

Rate intervals. The unit price of water increases as a function of the volume consumed. From the intervals, consumer prices increase as consumption exceeds permitted thresholds.

Fee thresholds. The unit price of water is constant since it does not exceed the comfort threshold. Once the excess consumption is assigned, a logarithmic increment is applied.

Auto - rate financing. The unit cost of the service is established based on household income and a comfort threshold. Once the limit is exceeded, the cost increases for each additional cubic volume.

Rate subsidy. The unit cost of the water or laminate service implies a standard rate and a subsidy based on a comfort threshold.

In short, the economic approach maintains that the availability of resources is an indicator of the ecological footprint that can be reduced based on a balance of costs and benefits [49]. Since natural resources are scarce, the corresponding increase in rates could guide the consumption of other resources with greater availability. Meanwhile, the endangered species natural resources could be conserved, since they would be protected by the high cost of their consumption, however, the consumption of a resource, from the psychosocial approach is determined by the processes of social influence. At least the psychology of sustainability has established two processes of influence: an order or direct majority and a minority or indirect.

The influence of the majority suggests that the systematic use of a resource is determined by the decision-making power of the majority [50]. If the bulk of the population has the habit of daily grooming, then the individual will be influenced to adopt an anthropocentric lifestyle where water resources are considered an exclusive service for current human needs, regardless of the capabilities of human generations. later and the needs of the population. current and future species [97]. The majority model is simple because through the consideration of an expert source it can influence the decision of the individual is the result of the controlling influence.

On the contrary, he argues that the minority influence consumption of natural resources due to the identity established by the individual to the group around him [81]. Therefore, the style of personal hygiene can vary according to the group life in which the individual is inserted. If the group has a policy of toileting with a minimum of water, then the individual will perform that action regardless of the availability of water. This is an indirect influence since lifestyle impacts the future more than the consumption decision in the present. Therefore, innovation is the main consequence of minority influence. Both processes of social life, the majority or the influence of the minority seem to ignore the availability of resources that approach economic spectacles as an essential factor, it is pertinent, since to warn that, regardless of the amount of water consumed, present or future decision making is determined by the social or group standard norm.

However, both the economic approach and the psychosocial approach seem to ignore the impact of the media since they are considered as media rather than transmitters of information [78]. The television, the radio or the newspapers to be conceptualized as diffusers situated to the facts related to the availability of water and the consumption of water as a consequence of a relationship of costs and benefits (economic approach). Or, conflicts between authorities and users are understood as a result of majority or minority influence (psychosocial approach).

On the contrary, if the media were conceptualized as sources of influence, then the conflicts between authorities and users over water availability, suburban supply, collection system and residential consumption, would be considered as indicators of the impact of the media framing public opinion.

The objective of this work is to establish the axes and issues of dissolution in the public agenda regarding water resources and services in the Coid-19 era, considering the health and economic crisis, as well as the confinement and social distancing that communication spreads... of risks of the government of Mexico due to the increase in cases of contagion, illness and death.

What are the press frameworks on the availability, supply, health and cost of drinking water service in central Mexico, considering the pandemic and its effects on the economy, the quality of water service and residential consumption?

The premise that answers the question and guides this work alludes to the fact that the risk communication of the Mexican government has generated expectations of availability, abstention, health and subsidy of water resources and services, but to the extent that cases of contagion increase, illness and death, such a perspective is transformed into a collective despair where conflicting issues arise such as scarcity, scarcity, unhealthiness and scarcity attributable to the policies of confinement and social distancing [36].

In this way, the theoretical, conceptual and empirical axes are exposed to model the relationships between the explanatory categories of the public agenda in terms of water resources and services in a pandemic scenario. then the methodological decisions and the results referring to the framing of the press are based, considering an observation period, as well as the discussion of the state of the art. Finally, lines of research are pointed out to clarify the relationship between the categories analyzed.

## 3. Method

An exploratory, qualitative and cross-sectional study was carried out. A convenience sample of 103 informative extracts about shortages, shortages, poor health, conflicts, leaks, repairs, boycotts, cancellations, sanctions, complaints, sites, rallies, demonstrations, participation, subsidies and rates in Iztapalapa, was demarcated at East. Mexico, Federal District February 2000 to December 2021. The selection criteria for the extracts were national movement, spatial reference, current information, length of content, clarity, statistics and public opinion polls.

Content analysis matrices were used in which information on publication date, source, header information and extract was emptied [31]. It should be noted that the content analysis matrices can be used to establish the frequencies of the informative notes and their weighting based on the assignment of a value to each heading and selected extract [45]. Later, in a similar matrix column, they included contextualization, framing and intensification to assign a value based on the type of media coverage.

The selection of the messages was made, which were structured for coding, weighting and sum matrices [62]. A value of 0 was assigned to those briefings that included information outside the problem of "scarcity", "quality", "subsidy", "sanction" or "discomfort". A value of 1 was assigned to those notes that included some of the keywords and declarations of some authority or user. Value 2 corresponded to those notes that included the keywords that described the water situation [84]. Finally, the value 3 assigned to those notes where extreme situations of vulnerability, marginalization, exclusion and resilience are included.

Weighting. Once the messages were selected, matrices were structured for their coding, weighting and sum [89]. The variables (setting, framing and priming), dimensions (shortages, leaks and rates) and indicators (egocentrism, anthropocentrism, ecocentrism, biosphere and hydrocentrism for setting, personal, residential, neighborhood and delegation for framing, low indirect intensity, low direct intensity, medium-intensity indirect, medium-intensity direct, high-intensity indirect, and high-intensity direct priming) were coded in analysis matrices in which dates, fonts, title, abstract, and news coding were entered.

A matrix was used for each interaction (devastated, leaks and rates) between water situations and lifestyles. A matrix analysis was used to obtain a water mediation index. 0 = egocentrism, 1 = clientelism, 2 = governmentalism, 3 = anthropocentrism, 4 = ecocentrism, 5 = biosphereism, 6 = hydrocentrism, 7 = opportunism, 8 = sensationalism, 9 = sensationalism: Regarding the construction calendar, values 10 = 11 were assigned = catastrophism and indifferentism. Regarding the framework: 1 = personal, 2 = residential neighborhood 3 = 4 = 5 = metropolitan municipality. Finally, the intensity of the message: 1 = low indirect intensity, direct intensity, 2 = low, 3 = medium indirect intensity, direct 4 = medium intensity, 5 = high indirect and direct intensity 6 = high intensity. The coding criteria were established from the ordinal level of measurement media coverage.

The coding is in accordance with the Theory of Production of the Communication and Social Representation Agenda. This implies that the results of the branded arrays are interpreted in the light of all three theories, if only in an exploratory approach. These approaches posit mutually inclusive contexts, frameworks, intensities, and directions. Therefore, news with a context score of 4 (hydrocentrism) is expected to correspond to a weight of 5 (metropolitan) and 1 (low indirect intensity). These scores demonstrate consistent media coverage.

Informative notes and editorials were collected on the water situation in the study demarcation. Subsequently, the information considering the approach of the Establishment Theory of the relative bias of the agenda of facts from the information framework in a style that prevailed the plausibility or codified verifiability. The content of the informative notes on the pricing system was qualified by the judges. Finally, the information was concentrated in another matrix for the presentation of results and interpretation of findings.

From the sum of each weighting, the index Framing the Water Situation (IESH) was established. The maximum likelihood score (9 scores multiplied by three framing peaks = 27 for each keyword) was 135 as each keyword was considered as one dimension framing (5 keywords, "scarcity", "quality", "subsidy ", "penalty" and "annoyed" for 27 framing peaks). Values close to 135 points were considered as evidence of informative bias regarding the framing of the events, and scores close to zero were considered as evidence of a lack of media coverage of the local water situation.

Very high medialization. In the dissemination of predominantly anthropocentric context messages and direct delegation framework with high intensity. High media coverage. Dominate the news with contexts of governmentality, reflective frameworks with high continuous current. Moderate media coverage. The informative notes are the governments promoted in reflective contexts and frames with high continuous current.

# 4. Results

The weights of each of the keywords of the selected paragraphs. The Water Situation Framing Index (IESH) reached 102 points, being in a moderate position. These findings show that the media coverage of the water situation in Iztapalapa tends to bias the "discomfort" of users in relation to the "scarcity" and "quality" of the public service. The results show a very low level close to zero with respect to the government level of "subsidy" and "penalty" with respect to dispensed storage. It seems that the print media tend to cover the facts from close to the users' perception regarding the criteria of their water situation.

In the case of the authorities, the press seems to consider it to be a determining factor in the situation and the biased information notes on quality to users include statements that discredit the public network.

If each informative note with the keywords and the coding criteria to weight the framed newspaper is analyzed, notes III, VI and VII reach values of 8 points out of 20 possible.

In the specific case of notes III, VI and VII "Fight for water in Iztapalapa", "A water supply viacrucis in Iztapalapa" and "Water supply is in crisis in Iztapalapa", the press simply magnifies the situation of withdrawal and discomfort of users.: "150 people waiting since dawn, at the intersection of Villa Franqueza and Villa Ximena, for the arrival of pipes to literally offer tips to the operators", "Sitting on the bench", "The hot sun goes down and more than four hours had what to expect Aarón "and" if the sun is hard ", complains Almirella Cristina, 77 years old. This is a coverage in which "quality", "subsidy" and "punishment" are not even explicitly or implicitly mentioned. Instead, the emphasis on the discomfort brought about by scarcity is consistent across all three notes.

Despite the bias around user discomfort, notes III, VI and VII did not accumulate a high-value frame since their contents do not involve other keywords that could encourage government action or social mobilization. The printed media are only aware of water situations that involve degrees of vulnerability, marginalization, exclusion and demarcation of resilience users.

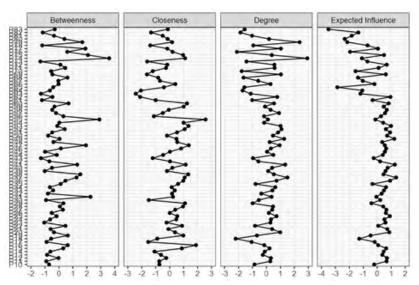
Regarding the notes V "Residents of Iztapalapa have been without water for eight days" and IX "Meters recorded air not water, alerting neighbors ", both accumulated 16 points out of 20 possible, only the quality of the public service was omitted in the case of the note V and subsidy in note IX. We can see that the notes have a civic organization bias "the tasks are distributed, even" throwing water "if a patrol that forces you to close the water reaches a record". Or, the press seems to justify the discomfort: "Although he has a metro, it does not reflect the situation in his family." Both notes indicate an extreme situation in which users have been forced to organize and justify their future actions in order to provide a service perceived as deficient.

The national press seems to bias its coverage of the shortages, their causes and consequences in the demarcation, but by not including in their notes aspects alluding to subsidies and sanctions, the printed media seem to adapt the situation to a network of vicissitudes in the face of which, users tend to adapt in an organized or improvised way.

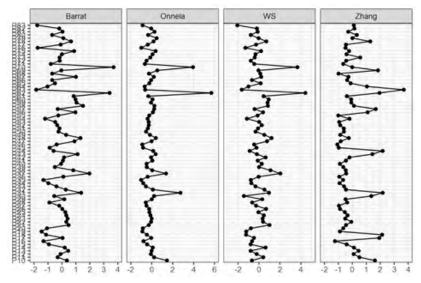
The national newspapers, during the period from 2019 to 2022, seem to exhibit a water situation inherent to the dynamics of the demarcation, since Iztapalapa is considered an area of scarcity and availability per capita. Even the exposed reports seem to corroborate the assumption that shortage situations tend to differentiate versions of the authorities and users, although it is the same facts, the press seems to agree that shortage is a problem that could not go beyond civil. Agitation.

Figure 1 shows the values that explain the proximity between the categories evaluated by the judges. The experts' criteria suggest that the categories related to water administration are close and form a prevalence structure. In other words, the sample surveyed suggests that the water problems of scarcity, shortages, unhealthiness and famine are central axes of the journalistic agenda in the period from 2019 to 2022. 9

Figure 2 shows the grouping of the categories evaluated by the judges. A learning was appreciated that goes from the scarcity of water to the optimization of resources in a context of health crisis. That is to say, the criteria of the expert judges warn of a grouping tenure among the categories that explain the water problems in the analyzed period. Figure 3 shows the values that explain the structure of relationships between water problems. The categories analyzed and evaluated by the experts are limited to a conglomeration of problems rather than solutions. A learning of the optimization of resources from the scarcity of water is revealed.



**Figure 1**: Centrality of water management in the literature from 2019 to 2022 Source: Elaborated with data study



**Figure 2**: Clustering of water management in the literature from 2019 to 2022 Source: Elaborated with data study

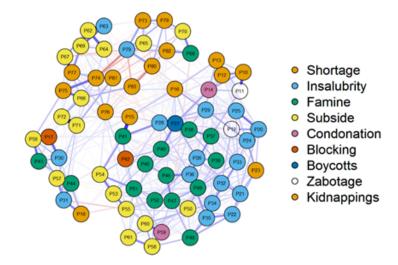


Figure 3: Network of water management in the literature from 2019 to 2022 Source: Elaborated with data study

#### 5. Discussion

The newspapers seem to indicate a perception or feeling of citizen discomfort and at the same time a series of strategies that the neighbors adopt in extreme situations, but beyond resilience, social mobilization is far from being triggered by the low availability of water. In this sense, the omission of authority as the guiding principle of public supply seems to corroborate the hypothesis that the demarcation is governed by a patronage system in which the supply of piped water is part of organized public action to minimize the effects of scarcity in Iztapalapa. As shortages intensify, the authorities, as can be inferred from newspaper reports, increase their supply chain and users will be more exposed to the stress that this implies.

Before presenting the results of the media coverage of sustainability, in 2007 a diagnosis was presented by the National Water Commission (CONAGUA) on the trend of the water situation in Iztapalapa. These data show a moderately low water situation in terms of availability and population density.

If there is a correspondence between institutional diagnoses, mediations and representations, it could predict a moderate media coverage in which the representations would be moderate. However, Agua Iztapalapa notices the media coverage in a different situation.

Only in the case of tariffs, the media coverage corresponds to CO-NAGUA's diagnosis. Regarding scarcity and filtration, the media seem to exaggerate both situations by promoting anthropocentric mediations in reflective frames with high intensity and impact direction of the situation on the inhabitants.

The differences between the messages in the newspapers and the diagnosis of CONAGUA imply a deep discussion of its dimensions and indicators.

In mediated scarcity, an anthropocentric agenda prevails that newspapers write their notes pointing out that nature is a resource that must be distributed equally to the exclusive use of human beings without passing through other species, animals and plants, forgetting that humanity is only part of the ecosystem. By framing media coverage of thoughtful desistances, newspapers forget that nature is interconnected. The Valley of Mexico basin, being connected to the Tula basin, impacts the water availability of the species that inhabit both ecosystems, if there is an imbalance between the two basins there is a crisis in the species that inhabit them. A consequence of shortages as an anthropocentric schedule is the intensity and direction that newspapers print in their messages when they describe the consequences of shortages in the economy or the actions of people. That is to say, the press is influenced by an anthropocentric ideology from which it produces and disseminates its news.

As for the media coverage of the leaks, rotating the agenda in a governmental dimension. This means that the flight attributed rigidities to the government more than to the deterioration of the infrastructure or to the inefficient construction companies that carried out the work. By framing the information at the municipal level, the newspaper reinforces the idea that the metropolitan authorities are responsible for the problem. Consequently, the attribution of responsibility to the State for the waste of water places the inhabitants as victims of the water policy.

Measured rates and CONAGUA diagnoses agree that the situation is moderately sustainable. Both from a government agenda and from a hydrological diagnosis, they agree on the need to raise rates and tariffs to bring a sustainable price. Even the newspapers seem to reinforce the idea that the only solution to the equitable distribution between current and future generations is the increase in fees, penalties and incentives for greater investment and coverage. Another aspect in which newspapers and CONAGUA experts agree is in delineating the rates according to consumption areas. While the information is circulated to the delegations, CONAGUA establishes quotas based on said demarcations. Both seem to agree that the price of fees directly impacts the economic well-being of residents.

From these distinctions, it is possible to infer that the press mediates the sustainability of water from the contexts, frameworks, intensities, and directions that self-centered favor, patronage, and anthropocentric government water politics aside from altruistic cultures, ecocentrists ' and hydrocentrists.

In this sense, the media and representative studies of water sustainability seem to advance towards the legitimization of sustainable water policies in their finances, forgetting that there are other alternatives that guarantee sustainability, inclusion and equity. In other words, media and representative studies seem to show that sustainability is possible if it is through policies that encourage water recycling, penalizing waste and redistributing the consumption and cost of drinking water.

In contrast, the present study has explored the dimensions and indicators that allow a description, explanation and understanding of altruistic, eccentric, biosphere and hydrometric sustainability.

#### 6. Conclusions

In Mexico, the public water service of the Federal District has been irregular in its supply in some districts. Such is the case of Iztapalapa in which the press has focused on the scarcity, leakage and coverage rate. For their part, citizens have manifested themselves in the absence of water and an inequitable payment system [74]. The interrelation between the three factors is substantial in signaling the establishment of a public agenda on supply and prices.

The state of the art has analyzed two styles of politicians, media and citizens ordered by two logical discourses: credibility and verifiability [43]. The scapegoating of any of the other actors and self-victimization are indicators of plausibility [44]. Instead, the responsibility for the data that describes the problem is an indicator of verifiability [69]. From both logics, an exploratory and retrospective study was carried out with a probabilistic sample of notes on the water situation in Iztapalapa during the period February 2000 to December 2012. The notes were codified and weighted in a Water Mediatization Index. The results show that scarcity (42 points out of a possible 220) the problem was more widespread in print media. In light of the reported theories and studies, the incidence of the press on public opinion and the establishment of a public agenda through the local collection system were discussed.

This work has established high media coverage of shortages, leaks, and fees around public drinking water. Based on this finding, it is possible to consider that the environmental policies related to the supply network would be delegitimized by the printed media in the Metropolitan Area of Mexico (AMMV). That is, the tendency of the media power around the problem of water scarcity to introduce leaks and rates as critical issues on the public agenda. In this sense, the scarcity that is coming in the coming years will be contextualized, framed and intensified by the media as a scenario of competition for resources. Since media coverage of water scarcity includes strong images that influence public opinion, drinking water users will increase their disagreement with the authorities. In such a situation, conflicts over water supply foster social and political changes, mainly in the design of public policies.

In a context of scarcity, water situations compete with media coverage in the design of environmental policies to care for vulnerable, marginalized and excluded sectors of the water service [75]. As droughts hit, media coverage will intensify to show the public that human lives are the state's priority rather than aid to livestock and farms. National security will be defined by news segments rather than by the supply of natural resources to the population.

This article has explored five dimensions of the water situation reported by the print media in Iztapalapa. The results show that the press focuses its bias on the description of malaise and shortages. These findings add to the studies by Rodríguez, et. al, [6] who found that scarcity favors scarcity beliefs and consequent saving. In the present study, scarcity seems to explain the framing of newspapers around the discomfort of users of public services. That is, in the situation of scarcity and scarcity, the press seems to consider strategies that the settlers can link to their discomfort around the quality of water and the rates of public services.

The national press, in the case of water scarcity in Iztapalapa, seems to be in tune with the coverage of the same issue in the Metropolitan Area of Mexico. In such a scenario, the system of fees, subsidies and sanctions. Even the management of water quality, according to Aguilar (2009) and Musseta (2009), is a replaceable element for negotiations between users, pipers and authorities. Water disputes could worsen in areas with high population growth and density. The scarcity of water would be one of the most immediate consequences for the health of the surrounding contaminated populations.

The problem of water in the context of Iztapalapa, a delegation of the Federal District, has been analyzed based on the impact of scarcity on water consumption. From the perspective of governance and participation, irregular supply has been identified as the main obstacle to sustainable local development [79]. Regarding the sociocognitive effects, the representations and beliefs of abundance and scarcity have explained the waste and saving of resources [76]. Even the residential dimensions and the maintenance of the facilities have determined that a low consumption is correlated with the increase of tariffs, subsidies, sanctions or supply programs.

However, the relationships between the supply systems, the administration and the supply of network users are qualified by the media when defining and transforming the facts into news, reports, opinion columns, tables, analysis or debate [83]. In all of these studies, the underlying conflict as past, present, and future revolved around the relationship between per capita water availability and domestic, industrial, and agricultural consumption. As the problems of scarcity and intermittent water service intensified, conflicts over supply would worsen into boycotts of municipal networks, hijacking of pipes, verbal confrontations with neighbors, rallies and blockades of avenues that led to disturbances and demonstrations.

In the context of these conflicts and social changes, the theories that explain the coverage of collective and governmental action on this issue and its influence on public opinion are especially relevant [85]. Both actions pose scenarios of public and social conflict from which studies have been carried out to establish hypotheses about the diversification of the problem in line with the heterogeneity of collective action and social movements.

For local development, the deterioration of the public supply system would be an indicator of the corruption and negligence of the authorities and the level of intransigence and conflict between communities and groups that dispute control of the supply. Public policies focused on water supply, clientelistic public supply programs [86], conflicts between authorities and users, collective action and social movements indicate levels of conflict that the media can reduce or expand, according to your criteria of coverage and expectation. The four actors: government authorities, water companies, the media and citizen groups would be immersed in an environment of water scarcity that conditions their actions. Water sustainability studies have established a significant relationship between scarcity and water storage. This relationship has been moderated by the print media in reference to the belief system of abundance or scarcity of water. Research on the subject has shown that anthropocentric beliefs about the abundance of water lead to the waste of resources. On the contrary, information alluding to scarcity has affected eccentric beliefs about water conservation.

It is true that the situation of water scarcity influences perceptions, decisions and actions regarding consumption; but between the facts of scarcity and leaks, the media seem to bias the situation to an extent that can influence the belief system of users of public services [90]. For example, a story about the deterioration of the supply network can influence the indiscriminate storage of water and eventually conflicts by increasing tariffs and hoarding. Therefore, a systematic review and retrospective coverage of the media in relation to water leaks could encourage discussion about its impact on the beliefs of users of the public water network. This preliminary investigation would serve to explain the action organized by the users on the variability of the availability of water in a demarcation.

The power of the media over public opinion makes them eligible as instruments par excellence of legitimacy of public policies. In this sense, water problems have been disrupted by media power, since the levels of availability, supply, hygiene and consumption related to water scarcity, corruption and inefficiency of the public service, have been transformed by the media in biased news, reviews, reports or advertisements (Verano, 2011: p. 191). Between environmental policies and user needs, the media are especially important. The media coverage of nature defines the public discussion about investments, fees, fines or subsidies [88]. Television news, information radio and newspaper front pages have a direct and significant impact on public opinion and action. To the extent that the media contextualize, frame and enhance the images of the events, they can bias and manipulate their audiences and audiences. In this sense, it is necessary to study the effect of media coverage of the water situation to shape the future of environmental policies related to drinking water, sewerage and public supply.

Due to its social relevance, the public policy-oriented water supply is disseminated through the media [91]. In this sense, the relationships between institutions, users and the media are a public agenda in which substantive issues are processed rationally or emotionally.

The rational approach implies the discussion of issues such as scarcity, drought, scarcity, consumption, saving or recycling of water. Institutions and the media often provide data on these issues that trigger discussion by the public. While the institutions responsible for the public water network and the media try to inform the symphysis of opinion, albeit deliberately or atypically, they influence the opinion of citizens on issues of importance: scarcity, scarcity and, more recently, conflicts between authorities and users by increasing drinking water rates.

By reducing or maximizing information, the media deliberately skew the facts to influence public opinion; but its fundamental purpose is to determine the political agenda [92]. At the local level, national newspapers showed the inefficiency of local authorities in charging fees and even increasing the cost of water supply. In other words, the print media fueled conflicts between users and authorities over the cancellation of debts in the demarcation of influence of the party in power and the increase in rates in areas of influence of the opposition party.

The media coverage of the cancellation of the debt for water services, the framing of the inefficiency of the government and the perception of injustice by the settlers could result in an environment of learned helplessness in which government and citizen actions aimed at to preserve the availability of water are reduced to isolated and dependent situations. on events of the consumer tariff system.

Psychological studies on the relationship between political, social and media systems suggest that television, radio and newspapers influence public programs through citizen opinion. In this sense, society would act as an intermediary: mediating or moderating the dissemination of political events. The difference between one or another function is to build attitudes towards the political system. If the public believes that there is a balance between political power and media power, then we are witnessing a phenomenon of moderation in which two factors, one media and one political, interact to explain the emergence of social movements. On the other hand, if public opinion considers that there is a hegemony between one or another power, be it media or political, then it is a mediation phenomenon in which citizen opinion regulates the flow of information to balance the power disparity.

Both phenomena, moderation and mediation, citizens located in an

intermediate stage in which media agendas seem to influence political agendas. In other words, the topics broadcast on television, radio and the press, despite their diversity and differentiation, influence the construction of consensus when it comes to prioritizing certain problems, meeting the demands and programming strategies of the intervention [96]. The moderation of public opinion is a sociopolitical system in which citizen participation unbalances the powers to submit to citizen initiative and scrutiny. On the contrary, the mediation of citizens over the influence of the media in political systems is an anti-democratic system that deprives it of ungovernability. Since the moderation of public opinion in the media and political differences seem to be the preamble to participatory democracy, it is necessary to discuss the process by which the media influences public opinion and is on the political agenda.

In sustainable cities, the drinking water system includes fixed rates and availability of consumption per capita; however, in the case of Mexico, Federal District, subsidies are essential for water supply in neighborhoods where the public network partially redistributes water resources intermittently. In the Mexican capital, subsidies, sanctions, cancellations, adjustments and stimuli, being an attribution of diverting authorities, are contested by public opinion and are a central issue on the national press agenda. It is a controversial situation where institutional, political and citizen actors actively participate in the discussion of the due process of the subsidy as a central issue in the public, political, public and media agenda.

If the heterogeneity of these agendas is aggravated by the coverage of the print media, then a systematic form of framing can be observed where national newspapers emphasize the increase or decrease of drinking water as a constant plausibility discourse in political, institutional and citizen actors [98]. As the press reports on rate adjustments, build a reporting style that justifies riders' outrage and delinquency in the face of a poor billing system and intermittent service, or show support for increasing or decreasing charges by preset volume. In this sense, journalistic coverage is impregnated with disagreements between authorities and users.

Although a sustainable system is built from rates that reflect the balance between availability and consumption, the collection system in Mexico, Federal District, seems to seek a balance between political agendas, citizens and the media. In this process, the types of information in the press are fundamental, since a greater emphasis on raising rates would imply an increase in conflicts between authorities and users. Therefore, the public agenda is built, according to the supply and demand for drinking water, not from its water dimension, but from the media. In this sense, the framing of the press is essential to explain the influence of public opinion editorials and the statements of the officials in charge of regularizing the public supply network. In other words, the styles of the news seem to encourage more declarations of balance from those involved than an imbalance related to the renunciation of any authority or citizen mobilization around the regularization of the service, the quality of the water or the prevention of water-borne diseases. This is a scenario in which the press does not seek to establish its agenda, but rather its objective seems to be oriented towards the incommensurability of the problem and the relativization of proposals.

The scarcity of water in the demarcations of the Federal District with low availability of water, population growth, residential density and industrialization, scenario of scarcity and shortage, from which conflicts are generated signaled by disagreements, verbal and physical confrontations, boycotts of the network of supply, sequestration of pipes, closure of avenues for demonstrations and rallies around the demand for regular water supply.

The analysis of the media framework, particularly the print media, is essential to clarify the prevailing issues and their insertion in the local civic, political and demarcation agenda in the surrounding information on the scarcity of supply, government actions and the corresponding mobilizations.

From the Theory that Establishes the Agenda and studies on the framing of the media have shown two logics: credibility and verifiability [100]. The first is to spread the coverage of facts of the State responsible for the quality of its public services to the detriment of the quality of life of citizens or retain wastewater from citizens to the detriment of vulnerable, marginalized or excluded areas of public services. The second logic, that of verifiability - operates under the framework of the facts, in such a way that readers can collect the information reported by the newspapers to make a rational judgment about it. For example, studies on the media around water politics in Iztapalapa, Mexico City, have established a direct and significant relationship between scarcity and conflicts between authorities and users of the public water network.

However, the studies Aitken and McMahon [1] and Berk et al., [9] demonstrated a causal relationship between the policies of sanctions and incentives for saving water and the substantial increase in rates. Studies on water scarcity have highlighted the emergence of conflicts between authorities and citizens as scarcity intensifies. Based on these findings, he discussed in this work the social and theoretical relevance of this problem with the aim of establishing a discussion agenda around the water problems of the local district.

#### References

- Aitken C, McMahon T. Residential water use: predictive and reducing consumption. Journal of Applied Social Psychology. 1994; 24: 136-158.
- Ajzen I. The Theory of Planned Behavior. Organizational Behavior and Human Decision Processes. 1991; 50: 179-211.
- Ajzen I, Joyce N, Sheikh S, Cote N. Knowledge and the prediction of behavior: the role of information accuracy in the Theory of Planned Behavior. Basic and Applied Social Psychology. 2011; 33: 101-117.
- Albacerrin D, Wyer R. Elaborative and non-elaborative processing of a behavior related communication. Personality and Social Psychology Bulletin. 2011; 27: 691-705.

- Albacerrin D, Wallace H, Hart W. How judgments change following comparison of current and prior information. Basic and Applied Social Psychology. 2012; 34: 44-55.
- Arriagada I. Citizen security and violence in Latin America. In: Carrión, F. (coord.). Citizen security mirage or reality?. 2002; Pg No: 109-140. Quito: FLACSO.
- Becerra M, Sainz J, Muñoz C. Conflicts over water in Mexico. Diagnosis and analysis. Management and Public Policy. 2006; 15(1): 111-143.
- Beck A, Sinatra G, Lombardi D. Leveraging higher education instructor in the climate literacy effort: factors related to university faculty's propensity to teach climate change". International Journal of Climate Change Impacts and Responses. 2013; 4(4): 1-17.
- Berk RA, Cooley TF, LaCivita CJ, Parker S, Sreld K, Brewer MB, et al. Reducing consumption in periods of acute scarcity: The case of water. Social Science Research. 1980; 9: 99-120.
- Berroeta H, Ramoneda A, Rodríguez V, Di Masso A, Vidal T. Place attachment, place identity, sense of community and civic participation in displaced persons from the city of Chaitén. Magallania. 2015; 43(3): 51-63.
- Bertalanffy L. Organismic system theory and psychology. Massachusetts: Barre Publishing Co.1968.
- Bizer G, Larsen J, Petty R. Exploring the valence framing effect: negative framing enhances attitude strength. politics psychology. 2010; 32: 59-80.
- Boza S. Participatory guarantee systems in the promotion of local markets for organic products. Cops. 2013; 12(34): 15-30.
- Briñol P, Horcajo J, De la Corte L, Valle C, Gallardo I, Díaz, D, et al. Effect of evaluative ambivalence on attitude change. Psychotheme. 2004; 16: 373-377.
- Bronfenbrenner U. Towards an experimental ecology of human development. American psychologist. 1977; 32: 523-530.
- Cacioppo J, Petty R. Effects of message repetition on argument processing, recall and persuasion. Basic and Applied Social Psychology. 1989; 10: 3-12.
- Campillo C. Strategic management of municipal information. Analysis of issues, treatment and invaded the town hall of Elche (1995-2007). Strategy Magazine, Trend and innovation Communication. 2012; 3: 149 170.
- Carr W, Patterson M, Yung L, Spencer D. The faithful skeptics: evangelical religious belief and perception of climate change. JSRNC. 2012; 3: 276-299.
- Carreon J, Hernández J, García C, Bustos JM, Morales ML, Aguilar JA, et al. The psychology of water sustainability: Public policies and consumption models. Bet. 2014; 63: 1-29.
- Corral V, Garcia F, Tapia C, Fraijo B. Sustainable behaviors and perceived psychological restoration. Psychological Research Act. 2012; 2(2): 749-764.
- Corral V, Mireles J, Tapia C, Fraijo B. Happiness as correlate of sustainable behaviors: a study of pro-ecological frugal, equitable and altruistic actions that promote subjective wellbeing". Research in Human Ecology. 2011; 18(2): 95-104.

- 22. Corral V, Tapia C, Ortiz A, Fraijo B. The virtues of humanity, justice and moderation and their relation to sustainable conduct. Inter-American Journal of Psychology. 2013; 45(3): 361-372.
- Cortes HG, Pena JI. From sustainability to sustainability, sustainable development model for its implementation in policies and projects. School of Business and Administration Magazine. 2015; 78, 40-54.
- Coulomb R. Sustainability of the urban and historical centrality. A reflection from the historic center of Mexico City. Quivera. 2008; 10 (2): 29-49.
- Cunsolo A, Harper S, Ford J, Edge V, Ladman K, Houle K, et al. Climate change and mental health: an exploratory case study from Rigolet, Nunatsiavut, Canada. Climate Change. 2023; 120(12): 255-270.
- Dasaklis T, Pappis C. Supply chain management in view of climate change: an overview of possible impacts and the road ahead. Journal of Industrial Engineering Management. 2013; 6(4): 1124-1138.
- Fazio R, Zanna M, Cooper J. Dissonance and self-perception: an integrative view of each theory's proper domain of application. Journal of Experimental Social Psychology. 1997; 13: 464-479.
- Fenol V. Active and passive users. Audience interactivity in digital media. Journal of Social Sciences. 2011; 51: 1-26.
- Fraijo B, Corral V, Tapia C, Garcia F. Adaptation and test of a scale of orientation towards sustainability in children of sixth year of basic education. Mexican Journal of Educational Research. 2012; 17(55): 1091-1117.
- Frias M, Corral V. Environmental and individual factors in adolescent anti-sociality: a structural model of Mexican teenagers. International Journal of Criminal Justice Sciences. 2013; 8(2): 198-214.
- Galicia LA, Balderrama JA, Navarro, RE. Content validity by expert judgment: proposal of a virtual tool. Opening. 2017; 9(2): 42-53.
- Garcia C. Hydrological exclusion. Interdisciplinary Journal Entelequia. 2010; 11: 41-59.
- Garcia C. Media coverage of water participation in Iztapalapa . Pihedraita J. ( coord .). Social management for human development. 2011; (pp. 521-547). Bogota: UCMC.
- Garcia C. Lifestyles around the water problems. A. Velasco (ed.). Studies on housing and urban space in historic centers. (pp. 229-244). Morelia: UMSH.2012.
- Garcia C. Specified model for the study of the effects of climate change on public health. William of Ockham Scientific Review. 2018; 16 (2): 1-10.
- Garcia C. Specification a model for study of risk governance. Journal of Media 6 Management. 2020; 2(1): 1-4.
- 37. Garcia C, Carreon J, Espinoza E Index of framing of social entrepreneurship in confinement caused by the coronavirus SARS CoV-2 and the disease Covid-19. Journal of Geography Environment & Earth Science International. 2021; 10(10): 1-12.
- Garcia JJ, Delgado MA, Garcia C. Reliability and validity of an instrument that measures health well-being. Eureka. 2018; 15(2): 1-11.
- 39. Garcia R, Marquez H. Mexico: Violence and insecurity. Towards a strategy of development and human security. Special Issue. 2013; 1-30.
- 40. Gaxiola, Frias M, Figuerero J. Protective factors and parenting styles:

a bioecological model. Mexican Journal of Research in Social and Health Psychology. 2011; 1: 28-40.

- Groshek J. Media, instability, to democracy: examining the granger causal relationships of the 122 country clubs from 1943-2003. Journal of Communication. 2011; 61: 1161-1182.
- Gu M, Goldfarb B. Affect and the framing effect witting Individuals over time: risk taking investment in a dynamic simulation. Academic Journal of Management. 2010; 53: 411-431.
- Guevara E. Management strategies for environmental sustainability. Industrial Engineering, News and New Trends. 2012; 3(8): 83-92.
- 44. Hallak R, Brown G, Lindsay N. The place identity relationships Among tourism entrepreneurs performance: a structural equation modeling analysis. Tourism Management. 2012; 33: 143-154.
- Henríquez C, Guzmán J, Salcedo D. Opinion mining based on the Spanish adaptation of ANEW on opinions about hotels. Natural Language Processing. 2016; 56: 25-32.
- 46. Hidalgo C, Pisano I. Predictors of risk perception and behavior in the face of climate change. a studio pilot. Psychology. 2010; 1: 36-49.
- Hughes S, Barnes D. The dominance of associative theorizing in implicit attitudes research: propositional and behavioral alternatives. psychology Research. 2011; 6: 465-498.
- Jimenez M. Definition and measurement of environmental awareness. International Journal of Sociology. 2010; 68: 735-755.
- Juarez M, Quiroz CY, Bustos JM, Garcia C. Validity of internet mediation scale in students of a mexican public university. Eureka. 2021; 18(1): 43-54.
- 50. Lopez L, Lopez J. Models adoption of information technologies from the attitudinal paradigm. EBAPE notebooks. 2011; 9: 176-196.
- Mao Y, M Solina RK, Kovacs J. Homelessness Coverage, Social Reality, and Media Ownership: Comparing a National Newspaper with to Regional Newspaper in Canada. Mass Communications & Journalism. 2012; 1: 2 -7.
- Markowitz E. In climate change and ethical issue? Examining young adults' beliefs about climate and morality. Climate Change. 2012; 114: 479-495.
- Martinez AN, Porcelli AM. A difficult path towards sustainable consumption: the dilemma between planned obsolescence, technology and the environment. Lex. 2016; 18(14): 333-378.
- 54. Martinez R, Martinez D. Perspectives of sustainability: theory and fields of analysis. Current Thought. 2016; 16(26): 123-145.
- McCombs M, Hua J. Capacity, diversity, and volatility of the public agenda. Trends from 1954 to 1994. Public Opinion Quarterly. 1995; 59: 495-525.
- McCombs M, Shaw D. The agenda setting function of mass media. Public Opinion Quarterly. 1972; 36: 176-187.
- McCombs ML, Lopez JE, Rey F. Candidate images in Spanish elections: second level agenda setting effects. Journalism & Mass Communication Quarterly. 1998; 74: 703-717.
- McCombs M. Influence of news about our images of our world. In J. Bryant, Zillman D. (ed.). The effects of the media. research and theo-

ries. (pp.13-34). Barcelona: Polity Press, 1996.

- McCombs M, Cole R, Stevenson R, Shaw D. Precision journalism: an emerging theory and technique of news reporting. Gazette. 1981; 27: 21-34.
- McCright A. The effects of gender of climate change knowledge and concern in the American public. Population and Environment. 2010; 32: 66-87.
- McCright A, Dunlap R. Cool dudes: the denial of climate change among conservative white males in the United States. Global Environmental Change. 2011; 21(4): 1167-1172.
- Medrano LA, Munoz R. Conceptual and practical approach to structural equation models. Digital Journal of Research in University Teaching. 2017; 11(1): 219-239.
- 63. Moyo M, Mvupm B, Kunzekweguta M, Mazvipavf F, Crawford P, Dorward P, et al. Farmer perceptions on climate change and variability in semiarid Zimbabwe in relation to climatology evidence. African Crop Science Journal. 2012; 20: 317-335.
- National Institute of Statistics, Geography and Informatics (2020). XIII National Population and Housing Census. Mexico: INEGI.
- National Population Council. Demographic situation in Mexico. Mexico: Conapo.2020.
- National Water Commission. National Water Program. 2007-2012. Mexico: Conagua.2018.
- National Water Commission. Banks water in Mexico. Mexico: Conagua.2021.
- Nava LF, Gandin J. Geopolitics of the environment: climate change and water resources, approaches to the case of Canada. Abaco. 2015; 3(85): 121-135.
- Nieto F. The legacy of the six-year term of corruption: the challenges of the national anti-corruption system. International Forum. 2020; 40(2): 683-715.
- Nisbet E, Stoycheff E, Pearce K. Internet Use and Democratic Demands: A Multinational, Multilevel Model of Internet Use and Citizen Attitudes about Democracy. Journal of Communication. 2012; 62: 249-265.
- Ozer G, Yilmaz E. Comparison of the theory of reasoned action and the theory of planned behavior: An application on accountant's information technology usage. African Journal of Business Management. 2011; 5: 50-58.
- Pasco A, Villafuerte M, Neyra F. Influence of technical-normative knowledge of the problem and the environmental attitude in decision-making regarding the national strategy on climate change. Contributions Magazine. 2010; 3: 191-193.
- Poortinga W, Spence A, Demski C, Pidgeon N. Individual motivational factors in the acceptability of demand side and supply side measures to reduce carbon emissions. Energy Policy. 2012; 48: 812-819.
- Restrepo JE. The concept of risk: Advances towards a model of perception of health risks. Psychospaces. 2016; 10(16): 174-200.
- Rivera A, Montero M, Sandoval R. Psychological maladjustment, quality of life and coping in diabetic patients with chronic renal failure on peritoneal dialysis. Mental Health. 2012; 35: 329-337.

- Sahin E, Ertepinar H, Teksoz G. University student's behaviors pertaining to sustainability: a structural equation model with sustainable relate attributes. International Journal of Environmental & Science Education. 2012; 7: 459-478.
- Sainz J, Becerra M. Conflicts over water in Mexico: research advances. Gazette of the National Institute of Ecology. 2003; 67: 61-68.
- Sandoval FR, Bustos JM, Juarez M, Garcia C. Specification a model for study of social work sustainability. Amazonia. 2021; 8(1): 343-353.
- Sandoval FR, Villegas E, Martinez E, Hernandez TJ, Quintero ML, Llamas B. Genealogy of human capital governance. International Journal of English Literature and Social Science. 2018; 3(5): 1-12.
- 80. Sandoval IE. Structural corruption approach: power, impunity and citizen voice. Mexican Journal of Sociology. 2016; 78(1): 119-152.
- Sandoval R, Saucedo N. Stakeholders in social networks: the case of Hi5 and Facebook in Mexico. Education and Humanities. 2010; 4: 132-142.
- Sartori G. Homo videns. Remote Control Society. Madrid: Taurus.1998.
- Schoon I, Cheng H, Gale C, Batty D, Deary I. Social status, cognitive ability, and educational attainment as predictors of liberal social attitudes and political trust. Intelligence. 2010; 38: 144-150.
- Shadfar S, Malekmohammadi I. Application of structural modeling (SEM) in restructuring state intervention strategies toward paddy production development. International Journal of Academic Research in Business & Social. 2013; (12): 576-618.
- Sharples D. Communicating climate science: evaluating the UK public's attitude to climate change. Earth and Environment. 2010; 5: 185-205.
- Solis M. Environmental behaviors of solid waste and water saving in the population of Costa Rica. Magazine Costa Rican Psychology. 2011; 79(44): 19-34.
- Sommer L. The Theory Planned Behavior and the impact of past behavior. International Business & Economic Research journal. 2011; 10: 91-110.
- Tapia C, Corral V, Fraijo B, Durón F. Assessing sustainable behavior and its correlates: a measure of proecological, frugal, altruistic and equitable actions. Sustainability. 2013; 5: 711-723.
- Tinto JA. Meta-analysis as an instrument for searching and selecting information. An experience in the bibliographical selection process for the development of a doctoral thesis. Management Vision, special issue. 2009; 203-229.
- Toledo WM. What do we talk about when we talk about sustainability? An ecological-political proposal. Journal of the International Living Wage Observatory. 2019; 1(2): 65-85.
- Tonello G, Valladares N. Environmental awareness and sustainable conduct related to the use of energy for lighting. Management and Environment. 2015; 18(1): 45-59.
- Touginha S, Pato C. Personal values, ecocentric environmental beliefs and ecological behavior of Brazilian workers: the case of the public ministry of the Federal District and Territories. Quaderns de Psicologia. 2011; 13: 35-45.

- Tversky A, Kahneman D. Rational choice and the framing of decisions. The Journal of Business. 1986; 59: 251-258.
- United Nations Habitat. Sickwater? The role of the central wastewater management in sustainable. A rapid response assessment. Birkiland: UN-Habitat.2010.
- 95. United Nations Water Water & the overall water security agenda. Ontario: United Nations University. 2021.
- Uribe ID, Gallo LE, Fernandez A. Traces of a hedonistic education. Movements. 2017; 23(1): 339-349.
- Vinneta M, Maharaj K. Environmental consciousness: and indicator of higher consciousness. International Journal of Scientific and Research Publications. 2013; 3: 1-5.
- Wendling Z, Attari S, Carley S, Krause R, Warren D, Rupp J, et al. On the importance of strengthening moderate beliefs in climate sciences to foster support for immediate action. Sustainability. 2013; 5: 5153-5170.
- 99. Wirth W, Matthes J, Schemer C, Wettstein M, Friemel T, Hânggli R, et al. Agenda building and campaigning for the referendum: investigate the flow of arguments between advocates, the media and the public. Communication Journalism and Media. 2010; 87: 328-345.
- 100. Yahya S, Hashemnia S, Rouhi M. Evaluating effective factor are customer's attitude to by green products. International Research Journal of Applied and Basic Sciences. 2012; 3(11): 2316-2312.