



Water Framing Network in Central Mexico during the COVID-19 era

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Abstract: *The press, by spreading the availability of resources, shortages linked with preservation. In this sense, the work explores nine briefings from 2002 to 2022 published in national newspapers regarding the lack of supply, quality, benefit, punishment and discomfort as a consequence of the water situation in a demarcation east of Mexico City. Index Framing the water situation (IESH) was used to weight the media bias in information note by content 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 the press regarding the problems arising from water shortages. From the results discussed its implications with other studies conducted in the demarcation.*

Keywords –Scarcity, quality, malaise, full and cost

Introduction

Until February 021, the pandemic has cut to 500 thousand in Mexico if the cases of death from atypical pneumonia and the population records of excess mortality are added (WHO, 2022). In this scenario, the mitigation policy forced the rationing of services considered essential (PAHO, 2022). The drinking water service already had a tendency towards shortages, shortages, unhealthy conditions and scarcity, but in the face of social distancing and confinement measures the situation has been exacerbated (OECD, 2022).

From an economic perspective, the Sustainable Development of water in Mexico, Federal District, for a tariff system that has been set as the water availability has increased from 300 liters per day per person with a unit cost of, 025 pesos in 1950 is indicated 120 liters per



day per capita in 2000 when it reached an average of 50 pesos per volume of bi - monthly consumption (Conagua, 2018). However, the collection system has been questioned by the psychosocial approach which warns a series of disputes arising out of drinking water and related - ph.

From the economic approach, the water problem is a imbalance between availability and consumption that can only be solved if a fee system is implemented. In the world 97.5% of the water is salty, sweet 2.24% and only 1% is available in rivers, lakes and aquifers for human consumption. 113000 km³ of water, are precipitated annually (United Nations Water, 2021: p. 13-18). Resource availability has decreased gradually. In 1950 only, Asia had a low availability and by 2025 this shortage will spread to five continents (Carr et al., 2012: p. 276). The imbalance between exploitation (estimated 4600 km³) of the resource and its natural recharge affect their availability for consumption (2400 km³) in agriculture, industry and domestic activities (United Nations Habitat, 2010: pp 16. -29).

In the case of Mexico, being the eleventh most populous country in the world (101.7 million people), with a density of 52 people per km² on average; a smaller population of 15 years (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 in 2050 increased 48%, estimating their population at 131, 7 million for 2030, has been classified with an index of extremely low availability with less than 1,000 cubic meters per capita per year (National Institute of Statistics , Geography and Informatics, 2020: pp. 3-24). Regarding the center and north of the country where economic growth is significant areas, the availability of the resource is classified as very low with 1000 to 2000 cubic meters per capita per year (Markowitz, 2012: p. 479). Only southeastern Mexico that has had some significant economic growth has been classified with high availability of 10,000 cubic meters per person per year (Martínez & Porcelli, 2016: p. 333). The northern, central and northeastern contributing 85% of gross domestic product (GDP) and have 77% of the population have only 32% of the availability of water, about 1874 cubic meters per capita per year. In contrast, the southeast area contributes 15% of GDP and accounts for 23% of the population 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 4573 cubic meters per person per year (National Water Commission, 2020: pp. 14-16).

In the case of the Metropolitan Area of Mexico inhabit 18,620,763 concentrated in an area of 4,979 square kilometers and a population density of 3,740 people per square kilometer acute intermittent water service as the main problem. In the MCMA, during the period from 1950 to 2000, the population has increased 5.25 times and went from 3'442,557 inhabitants 18'076,572 residents. Regarding the population density the State of Mexico and Mexico City are the first and second entities with more occupied dwellings being the most populous Iztapalapa with 1,750,336 of which half are under 15 years (National Population Commission, 2018: pp 23-55). Such a scenario is exacerbated when one considers that the quality of surface water of 393 stations in 225 rivers, 81 stations in 62 lakes and reservoirs, 26 stations in 13 sanctuaries and coastal sites, 15 stations wastewater discharge has been reported to be very low as well as the underground consisting of 228 stations in 24 aquifers, established by the Index Water Quality with values between 0 and 100, the latter being excellent value, after acceptable, slightly contaminated, polluted, heavily polluted, and the last as excessively contaminated. 60.7% of surface water and groundwater 46.3% are polluted and heavily polluted, classifying surface water the Valley of Mexico as excessively contaminated with a 32.49 (NWC, 2020: pp. 13).

Water supply in the ZMVM is $68 \text{ m}^3 / \text{sec}$. Which comes from wells operated $25.16 \text{ m}^3 / \text{sec}$. (37%), recharged wells $15 \text{ m}^3 / \text{sec}$. (22%), springs $.36 \text{ m}^3 / \text{sec}$. (2%), Cutzamala River $13.6 \text{ m}^3 / \text{sec}$. (20%) of Rio Lerma $6.12 \text{ m}^3 / \text{sec}$. (9%) and sanitation to $6.8 \text{ m}^3 / \text{sec}$. (10%). Regarding the degree of resource pressure, the MCMA ranks first with 120% overexploitation of available water. Although the hydrological situation is extremely committed to the MCMA, other hydrological regions are very close to this problem. The north, northeast and central areas exploit 40% of their water resources (National Water Commission, 2018: pp 58-64.). 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 he consumed 74 percent of the total water equivalent to 16,157 cubic meters per second supplied. Water in the Federal District, is aimed at industry (17%), trade (16%) and household goods (67%) which is divided into the use of toilet (40%), shower (30%),



clothing (15%), dishes (6%), kitchen (5%) and others (4%). Iztapalapa by concentrating the population had the highest consumption 2,732 cubic meters per second, equivalent to 16.9 percent of the total. Gustavo A. Madero and Alvaro Obregon with 13.75 and 9.94 percent respectively. In contrast, lower consumption delegations were Cuajimalpa, Tláhuac and Milpa Alta with 5.97 percent. In this sense, it is expected 2020 annual availability of 3,500 cubic meters per capita. Therefore, service coverage is exclusive with 905,000 people without drinking water because there is a shortage of six cubic meters per second (NWC, 2021: pp 30-36).

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

- Crítical between 1000 and 1700 meters cubic per year
- Low between 1700 and 5000 meters cubic per year
- Media between 5000 and 10,000 meters per year
- High m to s of 10,000 meters cubic per year

The 32.27 percent of users is within the threshold range, 78.5 percent have less than 50 cubic meters consumption, 11 percent consume less than 10 cubic meters and 0.38 consumes more than 180 cubic meters every two months (Cunsolo et al., 2013: p. 255). The average payment in Mexico City from 110.25 pesos every two months (Moyo et al., 2012: p. 317). This means revenue from fees charged to users of 80 percent in relation to its actual cost for the service (NWC, 2020: p. 31).

It is estimated that in 2025 80% of the world population will be high scarcity. The forecast for 2050 implies a range of temperature increase of 1.4 to 5.6 Celsius causing an increase of 44 centimeters in sea level, 5% more rainfall and extinction of a quarter of the species (Dasaklis & Pappis, 2013: p. 1124). In this sense, it is estimated 2025 global crisis irregular and unhealthy water supply in which 2000 million people will not have drinkable water. In 2030 the population growth of the Metropolitan Area of Mexico (MCMA) will be 22.5 million inhabitants, the metropolitan area of Guadalajara (ZMG) of 4.8 million inhabitants and the metropolitan area of Monterrey (ZMM) 4.9 million population. The issue of distribution of water resources would focus on those cities with more than 500 thousand inhabitants (McCright, 2011: p. 66). If we consider population projections, the metropolitan areas of Guadalajara, Monterrey, Cuernavaca, Tlaxcala, Veracruz, Puebla, Aguascalientes,



Toluca, San Luis and Cancun would be in a crisis of water availability expected by 2025 (NWC, 2018, pp 12-15).

The objective of this work is to establish the axes and issues of dissolution in the public agenda with respect to water resources and services in the Covid-19 era, considering the health and economic crisis, as well as the confinement and social distancing disseminated by communication of risks of the government of Mexico before the increase of cases of contagion, illness and death (Nava & Gandín, 2015: p. 121).

What are the press frames regarding 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 the water service and residential consumption?

The premise that responds to the question and guides this paper alludes to the fact that the Mexican government's risk communication has generated expectations of availability, abstention, health and subsidy of water resources and services, but to the extent that cases increase of contagion, disease and death, such a perspective is transformed into a collective hopelessness where opposing themes emerge such as scarcity, shortage, unhealthiness and scarcity attributable to the policies of confinement and social distancing (Garcia, 2020: p. 1).

In this way, the theoretical, conceptual and empirical axes are exposed in order 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 a period of observation, as well as the discussion of the state of the art (Beck et al., 2013: p. 17). Finally, lines of research are noted to clarify the relationship between the categories analyzed.

Theory of hydric governance

From the perspective of psychology of sustainability, the media by emphasizing the conflicts between local authorities and users of public drinking water, influence public opinion (Ajzen et al., 2011: p. 101). In this sense, systems theories, technological, informational and communicational have advanced the hypothesis of setting the agenda from the analysis of the frame of the facts to reveal as producers of information to the



media, as mediator to the opinion citizen and targeted policy initiatives law (Campillo, 2012: p. 149). This letter presents the picture of water availability about human consumption to contrast the economic approach against psychosocial approach to highlight conflicts arising from supply policy and the local collection, conceptualize and discuss their impact on public opinion, as well as the styles lifestyle of users.

If the media, as stated in the psychology of sustainability, presented conflict as central themes of water problems and they blame the authorities for inefficiency rates and expose closures avenues, boycotts facilities or kidnappings pipe 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 considering their frames collection of facts (Garcia et al., 2021: p. 1). The conceptualization of the role of the media contribute to the discussion about the role of the media, authorities and users as actors-oriented water sustainability in the demarcation agenda.

Theories of Technological Systems, informational and communicational have focused on explaining the relationship between resource availability and human lifestyles (Ajzen, 1991: 179). In this sense, the theoretical and conceptual approaches that will then discuss conflicts arising from the supply system and collection of drinking water in Mexico, Federal District are exposed (Berroeta et al., 2015: p. 51). TSG integrated a set of theories that include universal principles of integrative and dissipative systems (Carreon et al., 2014: p. 29). In the first case, the semi-open and semi-closed subsystems configured integrative systems because each information unit is linked to conduct a unidirectional transfer of an information exchange (Corral et al., 2012: p. 749). 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 you transform its structure.

Indeed, the TSG states that every system is anchored to a network of causes and effects, but there are principles that organize, not only to preserve its structure but to transform its relations with other similar elements of the environment (Albacerrín y Wyer, 2011: p. 691). For this purpose, permanent communication channels between each unit are required systemic (Fraijo et al., 2012: p. 1091). In this regard, the logistics system determines the



function of each structure factor or indicator (Hughes & Barnes, 2011: p. 465). Although the TSG explained the energy balance between systems and subsystems in the case of informational and communicative, this balance seems to be confined to the acts (Albacerrin et al., 2012: p. 4). If every living being carries significant acts, if every significant act is related in its vital balance, then there will be no significant events related to imbalances with the collapse of the information system.

In relation to other theories, TED includes elements that are compatible with the TSG. In the case of macrosystem, which includes all systems, subsystems, factors and indicators, TED, like the TSG, it states that the goal of a system is its systematic reproduction (Coulomb, 2008: p. 29). This is a cluster of interrelated such that the absence of any new configuration involves units (Jimenez, 2010: p. 735). The change from one configuration to another is exercised 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 (Ozer & Yilmaz, 2011: p. 50). So that the macro is changing between each unit.

The TED pioneered around the analysis of the content of a message, analyzable from its contextualization, framed and symbolic intensification. Such is the case of information mediated by television, radio, print and Internet (Gu & Goldfarb, 2010: p. 411). In this sense, environmental psychology, discipline which subscribes the TED, made systematic observations of scenarios where conflicts over territory and 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 the clarification of the meanings derived from a situation of scarcity, shortages and unsanitary conditions (Frías & Corral, 2013: p. 198). These meanings are essential to explain the establishment of a citizens' agenda for mobilization for water supply in a demarcation.

The TEA considers the media as a central power capable of defining the critical issues of the political agenda (McCombs and Hua, 1995: p. 495). That is, public policies and public programs would be determined by spreading some problems, which would impact on audiences, who constructed an imaginary and social unrest, the political class would consider when defining the budget items before during and after local or federal elections. However, the emergence of cyber insecurity and digital video surveillance



appear to have exceeded the TEA (Martinez & Martinez, 2016: p. 133). As information and communication systems are digitized, the budgets of the TEA seem to explain homogeneous facts in the information society have diversified to such an extent that necessitates the rethinking of TEA (McCombs et al., 1981: p. 127).

In principle, establish a correlation between the spread of media content and public opinion, even in the current decade, seems a complex undertaking, since the media diversifies its contents. In the past, set the journalistic bias was justified given the human subjectivity; today the media seem to obey economic, political or social purposes intermingled with one another that makes complicated to demonstrate the kind of bias which could locate (McCright & Dunlap, 2011: p. 1167).

Since the focus of the TEA, the relationship between the media and the state is explained by citizens (McCombs et al., 1998: p. 703). That is, the formation and development of public opinion over the last four decades of the TWENTIETH century, was explained by the occurrence of widespread propaganda film, newspaper, radio or television (Corral et al., 2011: p. 95). Society Mass was considered the effect of propaganda strategies that impinged on affection rather than the rationality of the audience, viewers, subscribers or readers (Hidalgo & Pisano, 2010: p. 36). It was a simple mechanism: the emission of phrases and images had a direct impact on the beliefs and attitudes, in the absence of the formation of expectations, knowledge or criteria. In this process, perceptions seemed to be influenced by the messages, since it was an automatic mechanism without information processing (Krippendorff, 2005).

As part of the psychology of the media, their propaganda effects in the formation of beliefs and attitudes, studies of agenda setting suggest that there is a causal relationship between the contents of the media and issues of interest public opinion (Corral et al., 2013: p. 361). It is a systematic and automatic processing of information. In this model the experience of receiving information communication active decisions that will affect the prospective behavior (Poortinga et al., 2012: p. 812). The spontaneity of a message could have a direct relationship with the heuristic reasoning. In this sense, the theory of Forward - Looking Decisions (NT) argues that in situations of uncertainty, decisions of individuals are



influenced by "mental shortcuts" in which a story about insecurity trigger distrust, fear or anger (Tversky & Kahneman, 1986: p. 251).

To the extent that insecurity messages are issued by the media, they influence an automatic mode in memory and the decisions of individuals. The continued spread of insecurity in the audience would lead psychosis and hysteria on the part of those who have been persuaded by the media. In this sense, the Theory of Probability of Development (STP) argues that information is processed in peripheral routes related to spontaneous decisions and improvised behavior, as well as central pathways involved with decisions and deliberate actions (Cacioppo and Petty, 1989: p. 12). These information processing is called as "need for cognition", defined as the biased information processing carried out by individuals at the time of being persuaded by a message.

However, the need for cognition would search for information in a bias that is to accept information that corroborates the beliefs and reject that which the questions. In this regard, readers of a newspaper appear to sympathize with those briefing notes that complement their beliefs about specific facts about a topic (Garcia et al., 2018: p. 1). In contrast, the notes refer opposing events to his convictions would have a greater persuasive effect if they are rejected at first instance by the recipients, but sow doubt themselves to such a degree seeking information to rebut the contrary message and after contrast information, they end up changing their convictions.

The TEA raises an explanation on why the media skews their briefing notes and determine the topics of discussion in public opinion. The TEA argues that information is processed by communication professionals, advertising and marketing to modify the content based on internal policies (McCombs, 1996: p. 13). The TEA biased warns that each message is not sufficient to be an indicator of manipulation, it is only transformed into a phrase, spot, image, news or opinion made. In this sense, the informative bias refers to the assessment of a third element affected by the relationship between media and audience. It is other media competing with the average highest - *rated* and, in view of its competence, is defined as a means of controlling and manipulative audience.

To say that the media, especially television, manipulate the audience to make them captive consumers of the darkest interests, it is the argument of the Theory of Remote-Control



Society (TST). From the socialization process rather than receiving media, media effects involve information learned by the audience based on images rather than speeches. The image seems to have shifted to the speeches. Coupled to the image, the spots replaced the sociopolitical speeches. Each - way relationship between image and viewer unveiled a remote - control society, manipulated, coopted, subverted and undermined their traditions to homogenize its consumerism. The relationship between spots and consumers to suggest that the influence of television makes it even irreplaceable Internet (Sartori, 1998: p. 10). Although the language of cyberspace is iconic-representational, the Internet cannot replace television as the audience fills the prime time for more than psychovisual iconic product. Precisely in this process is the captive relationship between television and audiences.

Studies of hydric governance

Bertalanffy (1968) argues that every living being exchanges energy with its surroundings. Such transactions configured systems which can be analyzable as energy flows in which the energy input (input) redistributes functions in the system to such a degree that stabilizes or destabilizes as appropriate. Such energy exchange may involve an energy disturbance. In this sense, a system encodes and decodes its distribution channels to address the decreasing or increasing demand. Thus, the production of a system is a function of energy input. The TSG was the first proposal for the study of human communication. Since every living creature demand, processed and consumed, it is necessary to consider living beings as systems not only energy, but also technology, information, communication and attitude.

McCombs and Shaw (1972: p. 176) correlated topics disseminated by the media to the issues reported by opinion polls and found positive and significant relationships, the formation of beliefs, perceptions, attitudes, intentions and behaviors seems to explain the second principle of TEA, namely: the spread in the media contents influence the political agenda, as public opinion minimizes or maximizes the issues to such an extent that the political class builds the agenda based on the frequency of issues surrounding spaces and channels of expression. Which established a positive and significant correlation between



the information disseminated by the media and the issues raised by the public during election campaigns the EU. The two principles of AST were built from this study that corroborated the assumption of informational bias and manipulation of public opinion. From the two premises, studies that tried to emulate the original study were developed. Some research advocated to show the trend of the agenda of the media in simultaneous periods.

Meanwhile et al., (1972) raised the Theory of Agenda Setting (TEA) to explain the informative bias and the influence of media coverage on the topics most discussed by public opinion.

Bronfenbrenner (1977: p. 523) suggests that the evolutionary development requires significant events related to personal or group experiences. Every act is an indicator of human development. Even those acts are confined to individual significant development in the environment, i.e., relationships between individuals and groups, determine the following acts of the person. Therefore, the Theory of Ecology Development (TED) argues that if we analyze the deliberate acts of people more than their speeches, find the indicator of each subsystem.

Fazio et al., (1977: p. 464) considered that the formation of attitudes toward the media and their messages involved direct activation of images and phrases with procedural memory. As messages were transmitted, its duration and repetition seemed to activate previous experiences and attitudes and thus were spontaneous actions without requiring any mental arithmetic or inquisitive reasoning.

Aitken and McMahon (1994: p. 136) argue appears to be dispensable as the increase in tariffs and reducing subsidies, would have minimal effects on users who are able to wait long hours to pipes, clandestinely milked the public network and encourage corruption around the purchase of water.

Sainz and Becerra (2002) argue that the increase of conflicts reported in the press is evidence of more than hydrological sociopolitical context of Mexico City. Such a finding is relevant for the present work because the supply shortage, not only encouraged, according to the press, the discomfort of users, but also the settlers seem to relate the problems with the tariff system of subsidies and penalties. That is, government action and social



mobilization reported by the press, seem to have a meeting. While print media omitted the State and maximize adaptation of users to the water situation, leave a gap between public policy and citizens' demands.

Sainz and Becerra (2003: p. 61) conducted a descriptive study on the content of the notes of newspapers and found an increasing trend of citizen mobilization. Users went from verbal statements to direct confrontations with the authorities, for example, closing avenues as leverage for regular water supply. In this regard, using a regression model.

Briñol, Gallardo, Horcajo, Court, Valle and Diaz (2004) with a sample of 73 students from Madrid, Spain established, through the F Parameter Fisher, significant differences between positive thoughts and / or unfavorable receptor priming weak and strong ($F = 10.35$, $p < .01$), reception of weak priming led to more unfavorable thought's receiver strong priming group. Regarding quality message interaction and self-affirmation ($F = 3.18$; $p = 0.07$), the weak priming influenced more assertiveness that in the control group.

Becerra, et. al, (2006: p. 111) found that the action of users has been reported as conflicting demonstrations has since gone from verbal statements to enforcement action. In this paper, it is established that citizen mobilization is more resilient than confrontational. In Iztapalapa, the water shortage seems to be significant since the press reports only intensive efforts grabbing water rather than verbal confrontations, closures avenues, boycotts the public network or kidnapping of pipes.

Arriaga Valenzuela (2009) correlated topics disseminated by national newspapers and broadcast content in news of national chains. As the news increased their content, topics covered by the press also increased. The category with the highest circulation was based on the economy and the spread was less corruption. During the period 2000-2005 the agenda items were similar in both the print and electronic media. crime and economics, broadcast frequency is similar in newspapers and newscasts: If two contrasting themes. Unlike the first study regarding the establishment of the agenda, the correlation between the subjects of different media opened the possibility to compare the construction of the agenda from various information and communication sources.

Bizer et al., (2010) the framing effect had an indirect relationship with intent. Through certain font, styles coverage and dissemination influenced the decisions of



individuals. Comparing indirect relationship with the framing effect seems to have been increased by the mediation of the credibility of the source. It is possible to assume that the information and communication style of the source appears to have influenced decisions to conduct a behavior linked to the object frame. In the case of insecurity, style communicator could influence the precautionary intentions of hearings. In the case of print media, editorials and opinion columns from a reliable source could impact precautionary measures by some readers.

Wirth et al., (2010) conducted a study that correlated the prominence of media, public and political arguments. They established positive partnerships between public and political arguments with media arguments in three amplitude levels; low, medium and high. When comparing media discourses of high and low influence, the authors found that the associations were significant at one level of intermediate range, neither too high nor too low. That is, the influence of the media on public opinion and political campaigns only becomes significant at a level intermediate coverage. Those media with a wide spread or low amplitude did not significantly influence public and political speeches. Such findings are relevant for this study because in the case of print media, those of national circulation or local circulation could not influence public opinion of a demarcation.

Fenoll (2011) conducted a study that established a significant relationship between conservative ideologies and passivity of users. In this work, the complexity of the message seems to influence the active receptor because it encourages their criticism. In contrast, the relatively simple ideological messages, had a greater effect on those conservative audiences tended to 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 messages on public opinion, more properly their cognitions; perceptions, beliefs, attitudes, intentions and actions in interaction with their socio-economic, demographic and educational characteristics.

García (2011: p. 41) found significant differences between those who perceive the shortage in their colony and those who consider it a problem of global order. This distinction supports the hypothesis around which the perception of the facts affects a greater extent than their perception through a media outlet. In this sense, this research has established that



the media only skews its contents retaking the beliefs of scarcity that users manifested in the demarcation. Apparently, the rotating before trying to influence your readers first belief system used to build their coverage of events. Analyzed the notes of the national newspapers regarding citizen participation in water supply in Iztapalapa. He found a tendency for the media to frame citizens' actions as inexorable government actions, ie, the press framed users of drinking water as violent, as their actions obey more to hoarding and marketing of water your personal needs. Conducted a systematization of the news frames and he found a positive relationship with the themes of public opinion. Intensified editorial and allusive notes to a war in three national newspapers corresponded with increasing attitudes toward war.

Groshek (2011: p. 1161) found positive and significant relationships between three media (television, radio and press) with respect to the socio-political situation in 122 countries. As the coverage and penetration of the media intensified, it is contributing to increased 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 differed from the levels of expectation corresponding to the other two media. The extent of media coverage and penetration seems to be the factor that most affects the construction of a participatory democracy.

Mateu & Rodriguez (2011) with a sample of 139 news demonstrated, through a content analysis, the similarities between national and local coverage around a protected area context. Such convergences activated the priming in both national and local public opinion.

Campillo (2012: p. 170) shows that the spread of public safety is proportionately neutral and overcomes the bias for or against the revised 1995-2007 shows, although press coverage is considered fortuitous for citizenship respect the issue of insecurity. This finding corroborates the hypothesis around which the incidence of print media seems to be explained by an automated processing of information rather than a deliberate, planned and systematic. That is, readers of the press, local or national, would be persuaded by content including images and phrases that would trigger past experiences of insecurity, decisions and improvised preventive actions.



Flowers and Mendieta (2012) found higher percentages in the negative perception of the press. For the most part, readers consider the contents incite violence. In this study, activation of emotions such as anger, sadness, disgust and insecurity could be related with disseminated by other media that being associated with press releases complement a cycle of persuasion events in which the media avocados would be massive deterrents scenarios show the public peace.

Mao et al., (2012) established significant differences between two local newspapers regarding six general topics: housing, beggary, health, economy, illegality and community. These results contrasted the hypothesis regarding the differences between information sources and heterogeneous effects on public opinion. As information sources diversify their content, would have a differential relationship with your readers, without implying a causal relationship, local print media having a greater number of subscribers, according to the studies reviewed, have a lower incidence in those readers with basic studies and migrants.

Left (2012) established significant similarities between the local press compared to the national movement in the rescue of the Chilean miners known worldwide for its social relevance.

Nisbet et al., (2012) 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 remained in the town, they increase their demands for information related to democracy.

Meanwhile et al., (2012) found that sex reverberated in news consumption on immigration while ideology reverberated in news allusive terrorism. Such findings, for the purposes of this study, could be extended to the notion of public safety. As men, professionals and most established witness acts of violence, crime seek allusive information from the briefing 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 with national newspapers are contrasted.



Garcia (2012) in a study carried out with editorials, columns and reports written on the same demarcation press, found indicators of social exclusion around the water service. The newspaper coverage on the kidnapping of pipes and grabbing water were considered as indicators of social segregation of water resources and services.

Modelling of hydric governance

The analysis of the relationships between systems, mainly communication can be performed from Theory of General Systems (TSG). Comparison of media coverage at local and national level, could be defined by the magnitude of the news (Boza, 2013: p. 15). It is a hyperopic effect is spread mostly perceived as distant facts in reference to the unconcern of local events. Because insecurity is a global problem, it is expected that regional or local newspapers spread over the events of violence, crime or discrimination occurring outside the demarcation (Groshek, 2011: p. 1161). The media farsightedness explains the citizen farsightedness consisting discuss issues perceived as distant and therefore worrisome, but inaccessible in reference to nearby events that force people to take precautionary measures and actions aimed at the preservation of order and public peace making. In this regard, it is expected that the inaction of citizenship is justified by the closeness of the facts of insecurity and coverage of national events.

Nature is significantly influenced by many different contexts. Nature can be represented as health contexts or tourism (Ruíz and Conde, 2002), science, academia, politics, agriculture, law, industry or commerce (Cataldi, 2004), awareness, management or pollution (Cheng and Palacios, 2009), disasters, radioactivity, socioeconomic and disease (Cortés & Peña, 2015: p. 40), nationalism, naturalism, expansionism, catastrophism, principles of sustainability, territorialism, economist and legalism (Tabara et al., 2004), nationalism, regionalism, localism, anthropism, abiotic, baptism (Gonzalez et al., 2011), climate, energy and water (Mendez, 2007). Contexts include actors such as; communities, officials, environmentalists and experts (Garcia, 2012: p. 521). 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 with development and solidarity. (Cheng and Palacios, 2009). Even contexts determine the



actions of the actors. Aquifer situations, tariffs, supply and restoration demonstrations affect demand (Becerra et al., 2006).

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 prescriptivist (Tabara et al., 2004), dehydration, risks, death, rates, cuts and illegal charges (Mendez (2007) environmental protest (Jimenez, 2005). If studies of the effect agenda advocated to explain the relationships between the contents of the media, issues of public opinion and the areas of public policy, studies framing effect warn that the style of coverage and media penetration incident directly in the socialization of citizenship (Gu & Goldfarb, 2010: p. 411)

It is a vicious or virtuous circle in which diffusion of the facts is an indicator of lack of governance or democracy that feeds back the discussion topics of public agenda (Gaxiola et al., 2011: p. 28). Referring to the amplitude of the media, authoritarian regimes seem to build relationships of distrust and democracies seem to build trust between citizens, media and politics res (Sandoval, 2016: p 199). Unlike calendar effect studies, studies framing effect observed that the communication style affects more than the amplitude of the medium. From the assumption that the establishment of the agenda would be indicated by framing effects rather than the correlation between media content and themes of public opinion,

The framing effect seems to have a close relationship with the management of information surrounding the subject matter, the formation of attitudes and decision-making (Garcia, 2013: p. 229). Studies framing effect appear to be a bridge between the calendar effect and intensity effect. Unlike these, studies framing effect is limited to explain the effect of the policy of the media on individual cognition (Pasco et al., 2010: p. 191). It is a complex process in which the number of messages and expressions of public opinion would be related by communication styles and styles of expression. Even the persuasive power of framing seems to increase with the styles involved in the dissemination of a message.

However, the explanation about the direct and significant effect between dissemination strategies and comments from public opinion seems to be affected by various factors (Sandoval et al., 2021: p. 343). Effect intensity studies have established positive



relationships between political ideology, level of education, length of residence and sex with respect to news consumption. They have also diagnosed perceptions of citizens regarding the contents of the media.

The effect of intensity explains the relationship between the features of diffusion and perceptions, beliefs, attitudes, knowledge, motives, decisions and actions of individuals. While the sentences of the media on an issue or have a persuasive deterrent purpose according to the source and type of receptor, the formation of attitudes obey two deliberate and spontaneous processes occurring in the personal cognition (Hallay, 2012: p. 143). The media can disseminate messages with ideological left or right, this information would compete with other messages that the recipient may well be internalized. 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 (Sandoval & Saucedo, 2010: p. 132). Such a process would involve a deliberate, planned and systematic away from passive readers strategy. Whereas the population reads a book a year and a half, automatic processing seems to explain the effect of intensity.

Rather, the public perception about the contents of the press seems to be closer to mistrust. From that citizen perceive the media as emitters of harmful content to democracy, equity and public peace, effect intensity studies have avocado to establish the relationship between messages and recipients.

The studies seem to show that intensity effect journalistic content to be focused on local issues, would trigger emotions that correspond with unforeseen decisions and actions in their readers (Sandoval et al., 2018: p. 1). Rotating bias in its coverage of the facts and the differences between local newspapers, seem to indicate a network news without restriction despite its systematic dissemination would have different effects in recipients. Finally, nature has been mediated from differences in intensity and direction.

From the studies cited, the **sustainable media coverage** can be defined as *receiving contexts* (setting), frames (framing), intensities and directions (priming) around the news of *scarcity or abundance, supply or shortage, leaks or repairs, savings or expense, penalties or incentives, decreased or increased rates.*



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

Standard rate. The rate per unit of water is independent of the amount of water consumed. The rate is the same regardless of the availability or consumption of water.

Volume rate. The unit price of water depends on the amount used, however increases or decreases from the government discretion.

Rate situation. The rate per unit of water cost increases during the day and decreases its cost overnight. During the summer season increases its cost and during the rainy season reduces its unit price.

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

Fees thresholds. The unit price of water is constant as does not exceed the threshold of comfort. Once assigned exceeded consumption, a logarithmic increase applies.

Self - financing rate. The unit cost of the service is established from household income and a threshold of comfort. Once over the limit, the cost increases for every extra cubic volume.

Rate subsidy. The unit cost of water service or laminated involves a standard fee and a subsidy based on a threshold of comfort.

In short, the economic approach argues that the availability of resources is an indicator of the ecological footprint which can be reduced from a balance of costs and benefits (Juarez et al., 2021: p. 53). As natural resources are scarce, the corresponding increase in rates would guide the consumption of other resources more availability. Meanwhile, natural resource endangered species could be preserved as it would be protected by the high cost of their consumption, however the consumption of a resource, from the psychosocial approach is determined by processes of social influence. At least the psychology of sustainability has established two processes influence an order or direct majority and a minority or indirect.

The majority influence suggests that the systematic use of a resource is determined by the power of majority decision (Lopez & Lopez, 2011: p. 176). If the bulk of the population has a habit of daily grooming, then the individual will be influenced to adopt a style of



anthropocentric life where water resources are considered an exclusive service for current human needs regardless of the capabilities of human generations later and the needs of current and future species (Vinneta & Maharaj, 2013: p. 5). The majoritarian model is straightforward because through considered an expert source may influence the decision of the individual consumer. Indeed, the conformity of the individual is the result of the controlling influence.

In contrast, argues that minority influence consumption of natural resources due to the identity established by the individual to the group around him (Sandoval & Saucedo, 2010: p. 132). Thus, grooming style may vary by group life in which the individual is inserted. If the group has a policy of grooming with a minimum of water, then the individual will perform that action regardless of the availability of water. This is an indirect influence as lifestyle impacts the future rather than the consumption decision in the present. Therefore, innovation is the main consequence of the minority influence.

Both processes of social, majority or minority influence seem to obviate the availability of resources that economic approach shows as an essential factor, are nevertheless relevant because warn that regardless of the amount of consumable water, decision making present or future 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 considered as means rather than as transmitters of information (Sandoval et al., 2021: p. 343). Television, radio or newspapers to be conceptualized as diffusers located to the facts concerning water availability and water consumption as a consequence of a relationship of costs and benefits (economic approach). Or, conflicts between authorities and users are understood as the result of the majority or minority influence (psychosocial approach).

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

Method



It conducted an exploratory, qualitative and cross - sectional study.

A convenience sample of 103 informative extracts around scarcity, shortage, poor health, conflicts, leaks, repair, boycotts, cancellations, penalties, complaints, sites, rallies, demonstrations, participation, subsidies and tariffs in Iztapalapa, demarcation was made to eastern Mexico, federal District February 2000 to December 2012. the criteria of choice of the extracts were national movement, spatial reference, current information, extension of content, clarity, statistics and public opinion polls.

We used content analysis matrices in which information on date of publication, source, header information and extract emptied (Galicía et al., 2017: p. 42). It should be noted that the content analysis matrices can be used to set the frequencies of the briefing notes and their weighting from assigning a value to each selected header and extract (Henríquez et al., 2016: p. 25). Later, in a similar matrix column they included contextualization, framed and intensification to assign a value depending on the type of media coverage.

After selecting the messages, they were structured matrices for coding, weighting and summation (Medrano & Muñoz, 2017: p. 219). He was assigned a value of 0 to those briefings that included information out of the problem of "shortage", "quality", "subsidy", "sanction" or "malaise". A value 1 to those notes which included some of the keywords and statements by some authority or user was assigned. Value 2 corresponded to those notes which included the keywords that described the water situation (Shadfar & Malekmohammadi, 2013: p. 576). Finally, the value 3 assigned to those notes where extreme situations of vulnerability, marginalization, exclusion and resilience are included.

Weighting. Once selected messages were structured matrices for coding, weighting and summation (Tinto, 2009: p. 203). The variables (setting, framing and priming), dimensions (desabasto, leaks and rates) and indicators (egocentrism, anthropocentrism, Ecocentrism, biosferismo and hidrocentrismo for setting, personal, residential, neighborhood and delegacional for framing, low indirect intensity, low intensity direct, indirect medium intensity, medium intensity direct, indirect high intensity and high intensity direct priming) were codified in analysis matrices in which dates, fonts, title, abstract and coding news emptied.



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

The coding is according to the Theory of Production of Communication and Social Representation Agenda. This implies that the results of matrices brandished be interpreted in the light of the three theories if only in an exploratory approach. Such approaches pose contexts, frames, intensities and directions mutually inclusive. Thus, it is expected that news with a score of 4 (hidrocentrism) for the context, corresponds to a weight of 5 (metropolitan) and 1 (low indirect intensity). These scores demonstrate a consistent media coverage.

Notes and informative editorials were collected regarding the water situation in the demarcation of study. Subsequently, the information considering the approach of the Theory of Establishing the relative bias of the facts Agenda from the frame of information in a style that prevailed likelihood or verifiability codified. We proceeded to qualify by judges the contents of the briefing notes regarding the charging system. Finally, the information in another matrix for the presentation of results and interpretation of findings concentrated.

From the sum of each weighting, the index Framing the water situation (IESH) was established. The score maximum likelihood (9 ratings multiplied by three peaks framing = 27 for each keyword) was 135 as each keyword was considered as a dimension framing (5 keywords, "shortage", "quality", "subsidy", "sanction" and "upset" by 27 peaks framing). Close to 135 points values were considered as evidence of bias informative about



the framing of the facts and scores close to zero were considered as evidence of no media coverage of the local water situation.

Medialization very high. In disseminating messages predominantly anthropocentric context and direct delegation frame with high intensity. High media coverage. Dominate the news with governmentalities contexts, deflectional frames with high direct current. Moderate media coverage. The briefing notes are promoted governmentalities deflectional contexts and frames with high direct current.

Results

The weights for each of the keywords of the selected paragraphs. Framing Index of Water Situation (IESH) reached 102 points being in a moderate position. Such findings show that media coverage about the water situation in Iztapalapa tends to skew the "malaise" of users in relation to the "shortage" and "quality" of public service. The results show a very low near zero regarding the "subsidy" government level, and "sanction" regarding storage dispended. It seems that the print media tend to cover the events from close to the perception of users regarding their water situation criteria. In the case of the authorities, the press seems to regard it as a determining factor in the situation and skewing information notes concerning quality to users include statements discrediting the public network (see Figure 2).

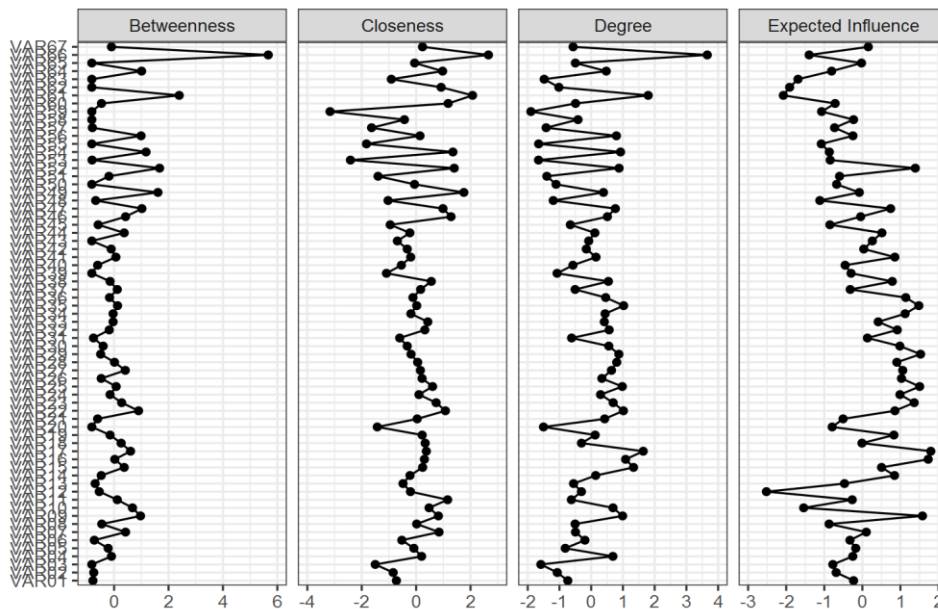


Figure 2. Centrality

Source: Elaborated with data study

If each briefing note with the keywords and coding criteria for weighting the framed newspaper analyzes, they draw attention to the notes III, VI and VII who reach values of 8 points of 20 possible. In the specific case of notes III, VI and VII " They fight for water in Iztapalapa", "A viacrucis water supply in Iztapalapa" and "Water supply is in crisis in Iztapalapa" the press just simply magnify the situation desists and discomfort of users: " 150 people waiting since dawn, at the junction of Villa Franqueza and Villa Ximena, the arrival of pipes for literally peereses offering tips operators", "Sitting on the bench", "Low the hot sun and more than four hours had to wait Aaron "and" is the sun re "hard,"complains Almirella Cristina, 77" . This is coverage where "quality", "subsidy" and "punishment" were not even mentioned explicitly or implicitly. In contrast, the emphasis in discomfort brought about by the shortage is consistent in all three notes. Despite the bias around the discomfort of users, notes III, VI and VII did not accumulate a high value framing since their contents do not involve other keywords that might encourage government action or social mobilization. Print media only realize water situations involving degrees of vulnerability, marginalization, exclusion and resilience user's demarcation. Regarding notes V "Residents of Iztapalapa take eight days without water" and IX "Meters recorded



air not water, alerting neighbors, " both accumulated 16 points from 20 possible, only omitted the quality of public service in the case of the note V and subsidy in note IX. We can see that the notes have a bias of the civic organization "tasks are distributed, even" throwing water "if a patrol that requires you to close the water reaches record". Or, the press seems to justify the discomfort: "A although has meter, it does not reflect the situation in his family." Both notes indicate an extreme situation where users have been driven to organize and justify their future acts to supply a service perceived as deficient. The national press seems to skew their coverage of the events of shortage, its causes and consequences in the demarcation, but not include in your note's aspects allusive subsidies and penalties, print media seem to fit the situation to a network of vicissitudes before which, users tend to adapt organized or impromptu. National newspapers, during the period from 2002 to 2022, appear to exhibit an inherent water situation to the dynamics of the demarcation since Iztapalapa is considered an area of scarcity and availability per capita. Even the briefings exposed, seem to corroborate the assumption that situations of shortages tend to differentiate versions of the authorities and users, although it is the same facts, the press seems to agree that the shortage is a problem that I could not go beyond the civil unrest (see Figure 2).

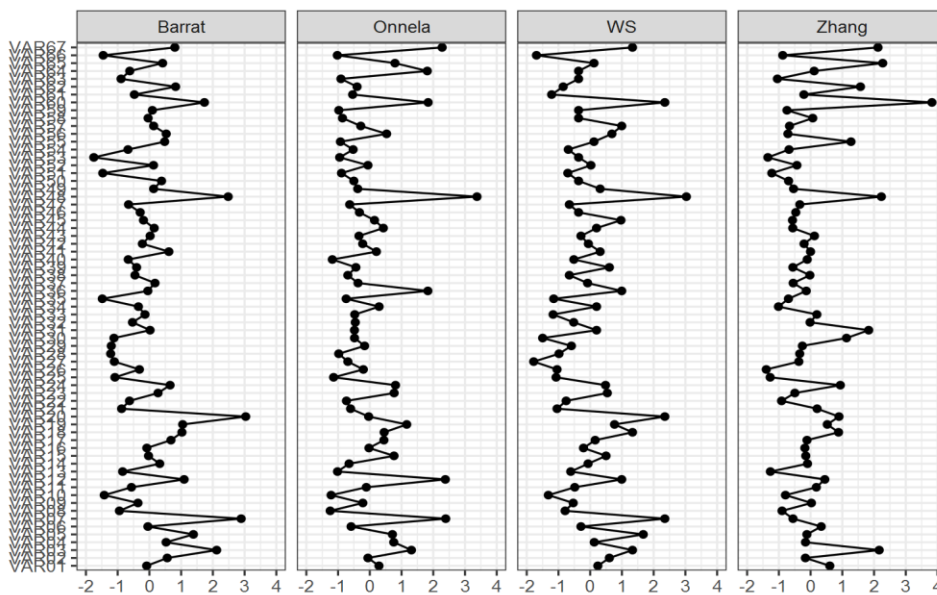


Figure 2. Clustering

Source: Elaborated with data study



Newspapers seem to indicate a perception or feeling of citizen unrest and at the same time a number of strategies that neighbors take in extreme situations, but beyond resilience, social mobilization is very far to be triggered by low water availability. In this sense, the omission of the authority as a guiding principle of public supply seems to corroborate hypothesis concerning the demarcation is being governed by a patronage system in which the provision of water through pipes is part of public action organized to minimize the effects shortages in Iztapalapa. As the shortage intensifies, the authorities, as may be inferred from newspaper reports, increase their supply chain and users will be more exposed to stress that this implies. Before presenting the results of the media coverage of sustainability, a diagnosis of the National Water Commission (CONAGUA) presented in 2007 on the tendency of the water situation in Iztapalapa. These data exhibit 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 representations would be moderate. However, water Iztapalapa warns media coverage in a different situation. Only in the case of tariffs, the media coverage corresponds to the diagnosis of CONAGUA. Regarding the shortage and leakage, the media seem to exaggerate both situations by promoting anthropocentric mediations in deflectional frames with high intensity and direction of impact of the situation on the inhabitants (see Figure 4).

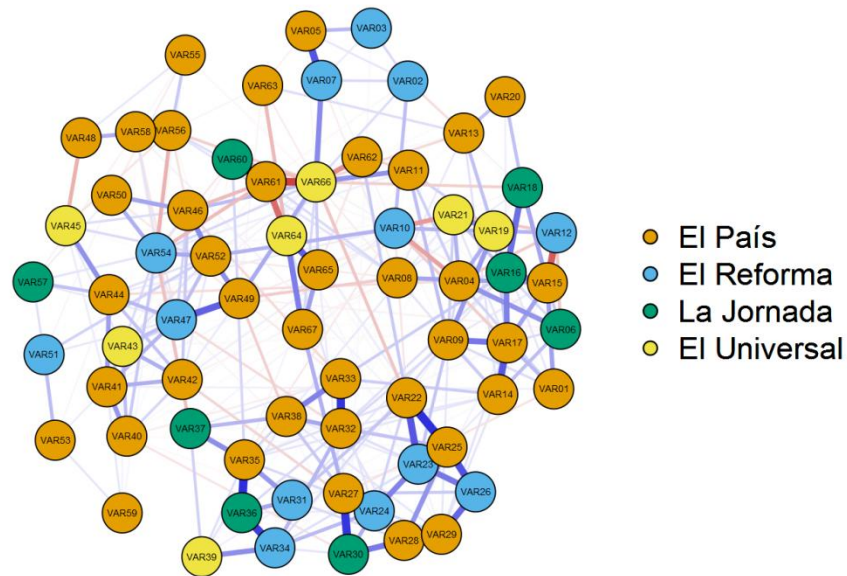


Figure 4. Neural network

Source: Elaborated with data study

The differences between messages from newspapers and diagnosis of CONAGUA involve a thorough discussion of its dimensions and indicators. In the mediated shortage prevails an anthropocentric agenda that newspapers write their notes stating that nature is a resource that should be distributed equally to the exclusive use of human bypassing other species, animals and plants, forgetting that humanity only it is part of the ecosystem. When framing media coverage of deflectional desists, rotary forget that nature is interconnected. The Valley of Mexico basin, being connected to the basin of Tula, impacts on 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. One consequence of the shortage as anthropocentric schedule is the intensity and direction that newspapers printed in their messages when they describe the consequences of shortages in the economy or the actions of people. That is, the press is influenced by an anthropocentric ideology from which produces and broadcasts its news. Regarding the media coverage of leaks, rotating the agendum in a government dimension. This means that leakage attributed stringencies government rather than to the deterioration of infrastructure or inefficient construction



companies who developed the work. By framing the information in a borough level, the daily reinforce the idea that metropolitan authorities are responsible for the problem. Consequently, attributing responsibility to the State for wasted water, places the inhabitants as victims of water policy.

Rates mediated and diagnosis of the CONAGUA agree that the situation is moderately sustainable. Both from a governmental agenda and hydrological diagnosis, agree on the need to raise rates and fees 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 tariffs, sanctions and incentives for greater investment and hedging. Another aspect that coincides newspapers and experts CONAGUA is in delineating the tariffs according to areas of consumption. While rotating frame the information to delegations, the CONAGUA sets quotas from such demarcations. Both seem to agree that the price of the rates directly impacts the economic well-being of residents. From these distinctions, it is possible to infer that the press mediatizes water sustainability from contexts, frames, intensities and directions that favor self-centered, patronage, and anthropocentric water policies governmentalities sidestepping altruistic cultures, Eco centrists, biseriates' and hydro centrists. In this sense, media and representational water sustainability studies seem to move towards the legitimization of sustainable water policies in their finances, forgetting that there are other alternatives that guarantee sustainability, inclusion and equity. That is, media studies and representational seem to demonstrate that sustainability is possible if it is through policies that encourage water recycling, penalizing the waste and redistributing consumption and the cost of drinking water. In contrast, the present study has explored the dimensions and indicators that allow a description, explanation and understanding of altruistic sustainability, eccentrical, biosphere and hydrometrical.

Discussion

In Mexico, Federal District public water service has been irregular in their supply in some districts. Such is the case of Iztapalapa in which the press has made a focus on the shortage, leakage and coverage rate. For its part, the public has manifested itself in the absence of



water and inequitable payment system (Restrepo, 2016: p. 174). The interrelationship between the three factors is substantial to note 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 speeches credibility and verifiability (Guevara, 2012: p. 83). The scapegoating of any of the other actors and self-victimization are indicators of verisimilitude (Hallak et al. 2012: p. 143). In contrast, the responsibility about the data describing the problem is an indicator of verifiability (Nieto, 2020: p. 683). From both logical, it conducted an exploratory and retrospective study with a probabilistic sample of notes concerning the water situation in Iztapalapa during the period February 2000 to December 2012. The notes were coded and weighted in a Mediatization Water Index. The results show that the shortage (42 points of 220 possible) the problem was more widespread by the print media. In light of the theories and studies reported the incidence of the press on public opinion and the establishment of a public agenda through local collection system he was discussed.

This work has established a high media coverage of the shortage, leaks and rates around public drinking water. From this finding it is possible to consider that environmental policies related to the supply network would be de-legitimized by the print media in the Metropolitan Area of Mexico (MCMA). That is, the tendency of media power around the water shortage problem to introduce, leaks and tariffs as critical issues on the public agenda. In this sense, the looming shortages in the coming years will be contextualized, framed and intensified by the media as an arena of competition for resources. Since the media coverage of water scarcity includes compelling images that influence public opinion, users of drinking water 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 for the care of vulnerable, marginalized and excluded from water service sectors (Rivera et al., 2012: p. 174). To the extent that droughts flood the media coverage fester will intensify to show audiences that human lives are the priority of the



state rather than aid to livestock and field. National security will be defined by the news segments rather than the supply of natural resources to the population.

This paper has explored five dimensions of the water situation that print media have reported in Iztapalapa. The results show that the press focuses its bias in the description of discomfort and shortages. These findings add to studies by Rodriguez, et. al, (2002) who found that the shortage favorable beliefs of scarcity and the consequent savings. In the present study, the shortage seems to explain the framing of newspapers around the discomfort of public service users. That is, in the situation of scarcity and shortage, the press, seems to consider strategies settlers can be linked with their discomfort around water quality and utility rates.

The national press, in the case of shortage of water in Iztapalapa, seems in tune with the coverage that has the same subject in the Metropolitan Area of Mexico. In such a scenario, the system of tariffs, subsidies and penalties. Even the quality management of water Aguilar (2009) and Musseta (2009) argue, it is a replaceable item for negotiations between users, pipers and authorities. The water disputes could worsen in areas with high population growth and population density. Water shortages would be one of their most immediate health of surrounding populations polluted water bodies consequences.

The water problems in the context of Iztapalapa, Federal District delegation has been analyzed from the impact of the shortage on water consumption. From the perspective of governance and participation, irregular supply has been identified as the main obstacle to sustainable local development (Sandoval et al., 2018: p. 12). Regarding the socio-cognitive effects, representations and beliefs of abundance and scarcity have explained the waste and resource savings (Sahin et al., 2012: p. 459). Even residential dimensions and maintenance of facilities have determined a low consumption correlates with the increase in tariffs, subsidies sanctions or supply programs.

However, relations between supply systems, administration and network users supply are qualified by the media at the time to define and transform the facts in news, features, opinion columns, tables, analysis or debate (Schoon et al., 2010: p. 144). In all these studies, the underlying conflict as the past, present and future themed around the relationship between the per capita availability of water and domestic, industrial and



agricultural consumption. As the problems of scarcity and intermittent water service intensified, conflicts over the supply would worsen in boycotts municipal networks, kidnappings of pipes, verbal confrontations with neighbors, rallies and blockades of avenues that lead to riots and mobilizations.

In the context of these conflicts and social change, the theories that explain the coverage of collective and governmental action on this issue and its influence on public opinion are particularly relevant (Sharples, 2010: p. 185). Both actions raise -public and social conflict scenarios from which have conducted studies to establish hypotheses concerning the diversification of the problem in line with the heterogeneity of collective action and social movements.

For local development, deterioration of public supply system would be an indicator of corruption and negligence of the authorities and the level of intransigence and conflict between communities and groups contesting control of supply. Public policies focused on water supply, programs clientelist public supply (Solis, 2011: p. 19), conflicts between authorities and users, collective action and social movements indicate levels of conflict that the media can reduce or amplify, according to its coverage criteria and expectation. The four actors: government authorities, water utilities, media and citizens groups would be immersed in an environment of water scarcity that determines their actions. Water sustainability studies have established a significant relationship between shortages and water storage. This relationship has been tempered 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. In contrast, the allusive information to the shortage has affected the eccentric beliefs about water conservation.

It is true that the situation of water scarcity influences perceptions, decisions and actions on consumption; but between the facts of shortages and leaks, the media seem to skew the situation to a point that may come to influence the belief system of public service users (Toledo, 2019: p. 64). For example, a story about the deterioration of the supply network can influence the indiscriminate storage of water and eventually in conflicts by increasing rates 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 the users of the public water network. This preliminary research would be if it is to explain the action organized by users regarding the variability of water availability in a demarcation.

The power of the media on public opinion makes them eligible as instruments par excellence of legitimacy of public policies. In this sense, water problems have been disrupted by the media power, since the levels of availability, supply, hygiene and consumption relating to water shortages, corruption and inefficiency of public service, have been transformed by the media in news, reviews, reports or biased ads (Summer, 2011: p. 191). Between environmental policies and the needs of users, the media are especially important. Media coverage of nature defines public discussion on investment, fees, penalties or subsidies (Tapia et al., 2013: p. 711). Television news, information radio and the front pages of newspapers directly and significantly impact on public opinion and action. To the extent that the media contextualize, frame and enhance images of the facts, they can reach skew and manipulate their audiences and audiences. In this regard, it is necessary to study the effect of media coverage of the water situations to shape the future of environmental policies relating to drinking water, sewerage and public supply.

For its social relevance, public policies-oriented water supply are disseminated through the media (Tonello & Valladares, 2015: p. 45). In this sense, relations between institutions, users and media are a public agenda that substantive issues are processed rationally or emotionally.

The rational approach involves discussion of issues such as scarcity, drought, shortage, consumption, saving or recycling water. Often, institutions and media provide data on these issues that trigger their discussion by the public. While the institutions responsible for the public water network and the media try to inform the opinion symphysis, while deliberately or uncharacteristically, influence citizens' opinions on issues of importance: shortages, shortages and, more recently, conflicts between authorities and users by increasing rates in the drinking water.

By reducing or maximize the information, the media deliberately skewing the facts to influence public opinion; but their essential purpose is to determine the political agenda (Touginha & Pato, 2011: p. 35). At the local level, national newspapers showed the



inefficiency of local authorities when collect fees and even increase the cost of water supply. In other words, the print media encouraged conflicts between users and authorities regarding debt forgiveness in the demarcation of influence of the party in power and the increase in tariffs in areas of influence of the opposition party.

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

Psychological studies on the relationship between political, social and media systems pose that television, radio and newspapers influence public programs through citizen opinion. In this sense, society would act as an intermediary: mediating or moderating the spread of political events. The difference between one or the other 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 restraint in which two factors, one media and other political interact, to explain the emergence of social movements. In contrast, if public opinion considers that there is a hegemony between one or the other power, either media or political, then it is a phenomenon of mediation in which citizen opinion regulates the flow of information to balance the disparity of power.

Both phenomena, moderation and mediation, citizens located at an intermediate stage in which the media agendas seem to influence political agendas. That is, the issues broadcast on television, radio and press, despite its diversity and differentiation, influence building consensus when prioritizing certain problems, meet the demands and program strategies intervention (Uribe, 2017: p. 339). Moderation of public opinion is a socio-political system in which citizen participation unbalances the powers to subject to scrutiny and citizen initiatives. On the contrary, mediation of citizens about the influence of the media on political systems is an undemocratic system that deprives ungovernability. Because the moderation of public opinion in media and political differences seem to be the preamble of participatory democracy, it is necessary to discuss the process by which the media influence public opinion and this on the political agenda.



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

If heterogeneity of these agendas is exacerbated by the coverage of the print media, then it will be possible to observe a systematic way of framing where national newspapers emphasize the increase or decrease of drinking water as a speech constant verisimilitude in political, institutional actors and citizens (Wendling et al., 2013: p. 5153). As the press reports on the adjustments to rates, build an informative style that justified indignation and delinquency users against a system of poor collection and intermittent service, or show your support for the increase or decrease charging for pre-set volume. In this sense, the newspaper coverage is permeated by disagreements between authorities and users.

While a sustainable system is constructed 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 media. In this process, the types of information the press are essential, since a greater emphasis on raising rates, would imply an increase of conflicts between authorities and users. Therefore, the public agenda is built, according to supply and demand of drinking water, not from its water dimension, but media. In this regard, the frame of the press is essential to explain the influence of public opinion editorials and statements of officials responsible for regularizing the public supply network. In other words, the styles of news stories seem to encourage more balance statements from those involved that an imbalance related to the waiver of any authority or citizen mobilization around the regularization of service, water quality or prevention hydro-borne diseases. This is a scenario in which the press does not seek to establish their agenda,



rather its aim seems to be geared to the incommensurability of the problem and the relativization of proposals.

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

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

From Theory Establishing the Agenda and studies concerning the framing of the media have shown two logical: the credibility and verifiability (Yahya et al., 2012: p. 2316). The first is to spread the coverage of events from the State responsible for the quality of its public services to the detriment of the quality of life of citizens or hold citizenship waste water to the detriment of vulnerable, marginalized or excluded from public service areas. The second logic-that of verifiability- operates under the frame of the facts in such a way that readers can collect the information reported by the newspapers to issue a rational judgment about it. For example, studies on media coverage around the water-policy in Iztapalapa, Mexico City, situation have established direct and significant relationship between shortages and conflicts between authorities and users of the public network water. However, studies Aitken and McMahon (1994: p. 136) and Berk et al., (1980: p. 99) demonstrated a causal relationship between the policies of sanctions and incentives for water savings and substantial increase in rates. Studies on water shortages have highlighted the emergence of conflicts between authorities and citizens as scarcity intensifies. From these findings, he discussed in this paper the social and theoretical relevance of this problem with the aim of establishing an agenda of discussion around the water problems of the local district.

Conclusion



Water governance has been explored in its media dimensions. A prevalence of mediatization indices was found that reveal a difference between official communication and the needs of users. The water agenda is a factor of water governance. As the agenda is configured as a difference between the public administration and the users of the drinking water service, the problems are established as axes of discussion. Scarcity, insecurity and famine are problems that indicate the water agenda and the emergence of governance as a management alternative. The political and social actors are oriented towards sustainability from the negotiations, agreements and co-responsibilities around rates, subsidies and forgiveness. In relation to the coupling of the organisms in charge of managing water resources and services, the present work offers the measurement of the effect of risk communication on the expectations registered in printed media.

References

- Aitken, C. & McMahon, T. (1994). Residential water use: predictive and Reducing consumption. *Journal of Applied Social Psychology*. 24, 136-158.
- Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*. 50, 179-211
- Ajzen, I., Joyce, N., Sheikh, S. y Cote, N. (2011). Knowledge and the prediction of behavior: the role of information accuracy in the Theory of Planned Behavior. *Basic and Applied Social Psychology*, 33, pp. 101-117
- Albacerrín, D. y Wyer, R. (2011). Elaborative and non-elaborative processing of a behavior related communication. *Personality and Social Psychology Bulletin*, 27, 691-705.
- Albacerrín, D., Wallace, H. y Hart, W. (2012). How judgments change following comparison of current and prior information. *Basic and Applied Social Psychology*, 34, 44-55
- Becerra, M., Sainz, J. and Muñoz, C. (2006). Conflicts over water in Mexico. Diagnosis and analysis. *Management and Public Policy*. 15 (1), 111-143
- Beck, A., Sinatra, G. y Lombardi, D. (2013). 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*, 4 (4), 1-17.
- Berk, RA, Cooley, TF, LaCivita, CJ, Parker, S., Sreld, K. & Brewer, MB (1980). Reducing consumption in periods of acute scarcity: The case of water. *Social Science Research*. 9 99-120
- Berroeta, H., Ramoneda, A., Rodríguez, V., Di Masso, A. y Vidal, T. (2015). Apego al lugar, identidad del lugar, sentido de comunidad y participación cívica en personas desplazadas de la ciudad de Chaitén. *Magallania*, 43 (3), 51-63
<https://scielo.conicyt.cl/pdf/magallania/v43n3/art05.pdf>
- Bertalanffy, L. (1968). *Organismic system theory and psychology*. Massachusetts: Barre Publishing Co.
- Boza, S. (2013). Los sistemas participativos de garantía en el fomento de los mercados locales de productos orgánicos. *Polis*, 12, (34), 15-30
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*. 32, 523-530
- Cacioppo, J. & Petty, R. (1989). Effects of message repetition on argument processing, recall and persuasion. *Basic and Applied Social Psychology*. 10: 3-12
- Campillo, C. (2012). Strategic management of municipal information. Analysis of issues, treatment and invaded the town hall of Elche (1995-2007). *Strategy Magazine, Trend and innovation Communication*. 3 149 170
- Carr, W., Patterson, M., Yung, L. y Spencer, D. (2012). The faithful skeptics: evangelical religious belief and perception of climate change. *JSRNC*, 3, 276-299.
- Carreon, J., Hernández, J., García, C., Bustos, J. M., Morales, M. L. y Aguilar, J. A. (2014). La psicología de la sustentabilidad hídrica: Políticas públicas y modelos de consumo. *Aposta*, 63, 1-29 <https://www.redalyc.org/pdf/4959/495950259004.pdf>
- Corral, V., García, F., Tapia, C. y Fraijo, B. (2012). Sustainable behaviors and perceived psychological restoration. *Acta de Investigación Psicológica*, 2 (2), 749-764.
- Corral, V., Mireles, J., Tapia, C. y Fraijo, B. (2011). Happiness as correlate of sustainable behaviors: a study of pro-ecological frugal, equitable and altruistic actions that promote subjective wellbeing”. *Research in Human Ecology*, 18 (2), 95-104.



- Corral, V., Tapia, C., Ortiz, A. y Fraijo, B. (2013). Las virtudes de la humanidad, justicia y moderación y su relación con la conducta sustentable. *Revista Interamericana de Psicología*, 45 (3), 361-372.
- Cortés, H. G. y Peña, J. I. (2015). De la sostenibilidad a la sustentabilidad, modelo de desarrollo sustentable para su implementación en políticas y proyectos. *Revista Escuela de Administración y Negocios*, 78, 40-54
<https://www.redalyc.org/pdf/206/20640430004.pdf>
- Coulomb, R. (2008). Sustentabilidad de la centralidad urbana e histórica. Una reflexión desde el centro histórico de la Ciudad de México. *Quivera*, 10 (2), 29-49
<https://www.redalyc.org/pdf/401/40113196003.pdf>
- Cunsolo, A., Harper, S., Ford, J., Edge, V., Ladman, K., Houle, K., Blake, S. y Wolfrey, C. (2013). Climate change and mental health: an exploratory case study from Rigolet, Nunatsiavut, Canada. *Climatic Change*, 120, (12), 255-270.
- Dasaklis, T. y Pappis, C. (2013). Supply chain management in view of climate change: an overview of possible impacts and the road ahead. *Journal of Industrial Engineering Management*, 6 (4), 1124-1138.
- Fazio, R., Zanna, M. & Cooper, J. (1977). Dissonance and self perception: an integrative view of each theory's proper domain of application. *Journal of Experimental Social Psychology*. 13, 464-479
- Fraijo, B., Corral, V., Tapia, C. y García, F. (2012). Adaptación y prueba de una escala de orientación hacia la sustentabilidad en niños de sexto año de educación básica. *Revista Mexicana de Investigación Educativa*, 17 (55), 1091-1117.
- Frías, M. y Corral, V. (2013). Environmental and individual factors in adolescent anti-sociality: a structural model of Mexican teenagers. *International Journal of Criminal Justice Sciences*, 8 (2), 198-214.
- Galicia, L. A., Balderrama, J. A. y Navarro, R. E. (2017). Validez de contenido por juicio de expertos: propuesta de una herramienta virtual. *Apertura*, 9 (2), 42-53
<http://dx.doi.org/10.32870/Ap.v9n2.993>
- García, C. (2010). La exclusión hidrológica. *Revista Interdisciplinaria Enelequia*, 11, 41-59.



- Garcia, C. (2011). Media coverage of water participation in Iztapalapa. Pihedraitá J. (coord.). *Social management for human development*. (Pp. 521-547). Bogota: UCMC
- García, C. (2012). Lifestyles around the water problems. A. Velasco (ed.). *Studies on housing and urban space in historic centers*. (Pp. 229-244). Morelia: UMSH
- García, C. (2018). Modelo especificado para el estudio de los efectos del cambio climático sobre la salud pública. *Revista Científica Guillermo de Ockham*, 16 (2), 1-10
<https://www.redalyc.org/jatsRepo/1053/105358033006/html/index.html>
- García, C. (2020). Specification a model for study of risk governance. *Ournal of Media 6 Management*, 2 (1), 1-4
- García, C., Carreon, J. & Espinoza, F. (2021). 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*, 10 (10), 1-12
- García, J. J., Delgado, M. A. & García, C. (2018). Confiabilidad y validez de un instrumento que mide el bienestar sanitario. *Eureka*, 15 (2), 1-11
- García, R. y Márquez, H. (2013). México: Violencia e inseguridad. Hacia una estrategia de desarrollo y seguridad humana. *Número especial*, 1—30
<https://www.redalyc.org/pdf/181/18127008015.pdf>
- Gaxiola, J., Frías, M. y Figuerero, J. (2011). Factores protectores y los estilos de crianza: un modelo bioecológico. *Revista Mexicana de Investigación en Psicología Social y de la Salud*, 1, 28-40.
- Groshek, J. (2011). Media, instability, to democracy: examining the granger causal relationships of the 122 country clubs from 1943-2003. *Journal of Communication*. 61, 1161-1182
- Gu, M. & Goldfarb, B. (2010). Affect and the framing effect witting Individuals over time: risk taking investment in a dynamic simulation. *Academic Journal of Management*. 53, 411-431
- Guevara, E. (2012). Estrategias de gestión para la sustentabilidad ambiental. *Ingeniería Industrial, Actualidad y Nuevas Tendencias*, 3 (8), 83-92
<https://www.redalyc.org/pdf/2150/215025114008.pdf>



- Hallak, R., Brown, G. & Lindsay, N. (2012). The place identity relationships Among tourism entrepreneurs performance: a structural equation modeling analysis. *Tourism Management*, 33, 143-154
- Henríquez, C., Guzmán, J. y Salcedo, D. (2016). Minería de opiniones basado en la adaptación al español de ANEW sobre opiniones acerca de hoteles. *Procesamiento del Lenguaje Natural*, 56, 25-32
<https://www.redalyc.org/pdf/5157/515754423002.pdf>
- Hidalgo, C. y Pisano, I. (2010). Predictores de la percepción de riesgo y del comportamiento ante el cambio climático. Un estudio piloto. *Psychology*, 1, 36-49.
- Hughes, S. y Barnes, D. (2011). The dominance of associative theorizing in implicit attitudes research: propositional and behavioral alternatives. *Psychological Research*, 6, 465-498.
- Kaur, Jagbir. "Streaming Data Analytics: Challenges and Opportunities." *International Journal of Applied Engineering & Technology*, vol. 5, no. S4, July-August 2023, pp. 10-16. <https://romanpub.com/resources/ijaetv5-s4-july-aug-2023-2.pdf>
- Pandi Kirupa Kumari Gopalakrishna Pandian, Satyanarayan kanungo, J. K. A. C. P. K. C. (2022). Ethical Considerations in Ai and MI: Bias Detection and Mitigation Strategies. *International Journal on Recent and Innovation Trends in Computing and Communication*, 10(12), 248–253. Retrieved from <https://ijritcc.org/index.php/ijritcc/article/view/10511>
- Ashok : "Ashok Choppadandi, Jagbir Kaur, Pradeep Kumar Chenchala, Akshay Agarwal, Varun Nakra, Pandi Kirupa Gopalakrishna Pandian, 2021. "Anomaly Detection in Cybersecurity: Leveraging Machine Learning Algorithms" *ESP Journal of Engineering & Technology Advancements* 1(2): 34-41."
- Kaur, J. (2021). Big Data Visualization Techniques for Decision Support Systems. *Jishu/Journal of Propulsion Technology*, 42(4). <https://propulsionejournal.com/index.php/journal/article/view/5701>
- Ashok : "Choppadandi, A., Kaur, J.,Chenchala, P. K., Nakra, V., & Pandian, P. K. K. G. (2020). Automating ERP Applications for Taxation Compliance using Machine



- Learning at SAP Labs. International Journal of Computer Science and Mobile Computing, 9(12), 103-112. <https://doi.org/10.47760/ijcsmc.2020.v09i12.014>
- Chenchala, P. K., Choppadandi, A., Kaur, J., Nakra, V., & Pandian, P. K. G. (2020). Predictive Maintenance and Resource Optimization in Inventory Identification Tool Using ML. International Journal of Open Publication and Exploration, 8(2), 43-50. <https://ijope.com/index.php/home/article/view/127>
- Kaur, J., Choppadandi, A., Chenchala, P. K., Nakra, V., & Pandian, P. K. G. (2019). AI Applications in Smart Cities: Experiences from Deploying ML Algorithms for Urban Planning and Resource Optimization. Tuijin Jishu/Journal of Propulsion Technology, 40(4), 50-56.
- Case Studies on Improving User Interaction and Satisfaction using AI-Enabled Chatbots for Customer Service . (2019). International Journal of Transcontinental Discoveries, ISSN: 3006-628X, 6(1), 29-34. <https://internationaljournals.org/index.php/ijtd/article/view/98>
- Kaur, J., Choppadandi, A., Chenchala, P. K., Nakra, V., & Pandian, P. K. G. (2019). Case Studies on Improving User Interaction and Satisfaction using AI-Enabled Chatbots for Customer Service. International Journal of Transcontinental Discoveries, 6(1), 29-34. <https://internationaljournals.org/index.php/ijtd/article/view/98>
- Choppadandi, A., Kaur, J., Chenchala, P. K., Kanungo, S., & Pandian, P. K. K. G. (2019). AI-Driven Customer Relationship Management in PK Salon Management System. International Journal of Open Publication and Exploration, 7(2), 28-35. <https://ijope.com/index.php/home/article/view/128>
- Ashok Choppadandi, Jagbir Kaur, Pradeep Kumar Chenchala, Akshay Agarwal, Varun Nakra, Pandi Kirupa Gopalakrishna Pandian, 2021. "Anomaly Detection in Cybersecurity: Leveraging Machine Learning Algorithms" ESP Journal of Engineering & Technology Advancements 1(2): 34-41.
- Ashok Choppadandi et al, International Journal of Computer Science and Mobile Computing, Vol.9 Issue.12, December- 2020, pg. 103-112. (Google scholar indexed)



- Choppadandi, A., Kaur, J., Chenchala, P. K., Nakra, V., & Pandian, P. K. K. G. (2020). Automating ERP Applications for Taxation Compliance using Machine Learning at SAP Labs. *International Journal of Computer Science and Mobile Computing*, 9(12), 103-112. <https://doi.org/10.47760/ijcsmc.2020.v09i12.014>
- Chenchala, P. K., Choppadandi, A., Kaur, J., Nakra, V., & Pandian, P. K. G. (2020). Predictive Maintenance and Resource Optimization in Inventory Identification Tool Using ML. *International Journal of Open Publication and Exploration*, 8(2), 43-50. <https://ijope.com/index.php/home/article/view/127>
- AI-Driven Customer Relationship Management in PK Salon Management System. (2019). *International Journal of Open Publication and Exploration*, ISSN: 3006-2853, 7(2), 28-35. <https://ijope.com/index.php/home/article/view/128>
- Pradeep Kumar Chenchala. (2023). Social Media Sentiment Analysis for Enhancing Demand Forecasting Models Using Machine Learning Models. *International Journal on Recent and Innovation Trends in Computing and Communication*, 11(6), 595–601. Retrieved from <https://www.ijritcc.org/index.php/ijritcc/article/view/10762>
- Tilala, Mitul, Saigurudatta Pamulaparthivenkata, Abhip Dilip Chawda, and Abhishek Pandurang Benke. "Explore the Technologies and Architectures Enabling Real-Time Data Processing within Healthcare Data Lakes, and How They Facilitate Immediate Clinical Decision-Making and Patient Care Interventions." *European Chemical Bulletin* 11, no. 12 (2022): 4537-4542. <https://doi.org/10.53555/ecb/2022.11.12.425>.
- Mitul Tilala, Abhip Dilip Chawda, Abhishek Pandurang Benke, Akshay Agarwal. (2022). Regulatory Intelligence: Leveraging Data Analytics for Regulatory Decision-Making. *International Journal of Multidisciplinary Innovation and Research Methodology*, ISSN: 2960-2068, 1(1), 78–83. Retrieved from <https://ijmirm.com/index.php/ijmirm/article/view/77>
- Mitul Tilala. (2023). Real-Time Data Processing in Healthcare: Architectures and Applications for Immediate Clinical Insights. *International Journal on Recent and Innovation Trends in Computing and Communication*, 11(11), 1119–1125. Retrieved from <https://www.ijritcc.org/index.php/ijritcc/article/view/10629>



- Tilala, Mitul, and Abhip Dilip Chawda. "Evaluation of Compliance Requirements for Annual Reports in Pharmaceutical Industries." *NeuroQuantology* 18, no. 11 (November 2020): 138-145. <https://doi.org/10.48047/nq.2020.18.11.NQ20244>.
- Dodda, Suresh, Navin Kamuni, Venkata Sai Mahesh Vuppalapati, Jyothi Swaroop Arlagadda Narasimharaju, and Preetham Vemasani. "AI-driven Personalized Recommendations: Algorithms and Evaluation." *Propulsion Tech Journal* 44, no. 6 (December 1, 2023). <https://propulsionejournal.com/index.php/journal/article/view/5587>
- Kamuni, Navin, Suresh Dodda, Venkata Sai Mahesh Vuppalapati, Jyothi Swaroop Arlagadda, and Preetham Vemasani. "Advancements in Reinforcement Learning Techniques for Robotics." *Journal of Basic Science and Engineering* 19, no. 1 (2022): 101-111. ISSN: 1005-0930.
- Dodda, Suresh, Navin Kamuni, Jyothi Swaroop Arlagadda, Venkata Sai Mahesh Vuppalapati, and Preetham Vemasani. "A Survey of Deep Learning Approaches for Natural Language Processing Tasks." *International Journal on Recent and Innovation Trends in Computing and Communication* 9, no. 12 (December 2021): 27-36. ISSN: 2321-8169. <http://www.ijritcc.org>
- Jigar Shah , Joel lopes , Nitin Prasad , Narendra Narukulla , Venudhar Rao Hajari , Lohith Paripati. (2023). Optimizing Resource Allocation And Scalability In Cloud-Based Machine Learning Models. *Migration Letters*, 20(S12), 1823–1832. Retrieved from <https://migrationletters.com/index.php/ml/article/view/10652>
- Joel lopes, Arth Dave, Hemanth Swamy, Varun Nakra, & Akshay Agarwal. (2023). Machine Learning Techniques And Predictive Modeling For Retail Inventory Management Systems. *Educational Administration: Theory and Practice*, 29(4), 698–706. <https://doi.org/10.53555/kuey.v29i4.5645>
- Narukulla, Narendra, Joel Lopes, Venudhar Rao Hajari, Nitin Prasad, and Hemanth Swamy. "Real-Time Data Processing and Predictive Analytics Using Cloud-Based Machine Learning." *Tuijin Jishu/Journal of Propulsion Technology* 42, no. 4 (2021): 91-102.



- Nitin Prasad. (2022). Security Challenges and Solutions in Cloud-Based Artificial Intelligence and Machine Learning Systems. *International Journal on Recent and Innovation Trends in Computing and Communication*, 10(12), 286–292. Retrieved from <https://www.ijritcc.org/index.php/ijritcc/article/view/10750>
- Varun Nakra, Arth Dave, Savitha Nuguri, Pradeep Kumar Chenchala, Akshay Agarwal. (2023). Robo-Advisors in Wealth Management: Exploring the Role of AI and ML in Financial Planning. *European Economic Letters (EEL)*, 13(5), 2028–2039. Retrieved from <https://www.eelet.org.uk/index.php/journal/article/view/1514>
- Varun Nakra. (2023). Enhancing Software Project Management and Task Allocation with AI and Machine Learning. *International Journal on Recent and Innovation Trends in Computing and Communication*, 11(11), 1171–1178. Retrieved from <https://www.ijritcc.org/index.php/ijritcc/article/view/10684>
- Joel lopes, Arth Dave, Hemanth Swamy, Varun Nakra, & Akshay Agarwal. (2023). Machine Learning Techniques And Predictive Modeling For Retail Inventory Management Systems. *Educational Administration: Theory and Practice*, 29(4), 698–706. <https://doi.org/10.53555/kuey.v29i4.5645>
- Big Data Analytics using Machine Learning Techniques on Cloud Platforms. (2019). *International Journal of Business Management and Visuals*, ISSN: 3006-2705, 2(2), 54-58. <https://ijbmv.com/index.php/home/article/view/76>
- Shah, J., Prasad, N., Narukulla, N., Hajari, V. R., & Paripati, L. (2019). Big Data Analytics using Machine Learning Techniques on Cloud Platforms. *International Journal of Business Management and Visuals*, 2(2), 54-58. <https://ijbmv.com/index.php/home/article/view/76>
- Cygan, Kamil J., Ehdieh Khaledian, Lili Blumenberg, Robert R. Salzler, Darshit Shah, William Olson, Lynn E. Macdonald, Andrew J. Murphy, and Ankur Dhanik. "Rigorous Estimation of Post-Translational Proteasomal Splicing in the Immunopeptidome." *bioRxiv* (2021): 1-24. <https://doi.org/10.1101/2021.05.26.445792>
- Shah, Darshit, Ankur Dhanik, Kamil Cygan, Olav Olsen, William Olson, and Robert Salzler. "Proteogenomics and de novo Sequencing Based Approach for Neoantigen



- Discovery from the Immunopeptidomes of Patient CRC Liver Metastases Using Mass Spectrometry." *The Journal of Immunology* 204, no. 1_Supplement (2020): 217.16-217.16. American Association of Immunologists.
- Mahesula, Swetha, Itay Raphael, Rekha Raghunathan, Karan Kalsaria, Venkat Kotagiri, Anjali B. Purkar, Manjushree Anjanappa, Darshit Shah, Vidya Pericherla, Yeshwant Lal Avinash Jadhav, Jonathan A.L. Gelfond, Thomas G. Forsthuber, and William E. Haskins. "Immunoenrichment Microwave & Magnetic (IM2) Proteomics for Quantifying CD47 in the EAE Model of Multiple Sclerosis." *Electrophoresis* 33, no. 24 (2012): 3820-3829. <https://doi.org/10.1002/elps.201200515>.
- Big Data Analytics using Machine Learning Techniques on Cloud Platforms. (2019). *International Journal of Business Management and Visuals*, ISSN: 3006-2705, 2(2), 54-58. <https://ijbmv.com/index.php/home/article/view/76>
- Cygan, K. J., Khaledian, E., Blumenberg, L., Salzler, R. R., Shah, D., Olson, W., & ... (2021). Rigorous estimation of post-translational proteasomal splicing in the immunopeptidome. *bioRxiv*, 2021.05.26.445792.
- Mahesula, S., Raphael, I., Raghunathan, R., Kalsaria, K., Kotagiri, V., Purkar, A. B., & ... (2012). Immunoenrichment microwave and magnetic proteomics for quantifying CD 47 in the experimental autoimmune encephalomyelitis model of multiple sclerosis. *Electrophoresis*, 33(24), 3820-3829.
- Mahesula, S., Raphael, I., Raghunathan, R., Kalsaria, K., Kotagiri, V., Purkar, A. B., & ... (2012). Immunoenrichment Microwave & Magnetic (IM2) Proteomics for Quantifying CD47 in the EAE Model of Multiple Sclerosis. *Electrophoresis*, 33(24), 3820.
- Raphael, I., Mahesula, S., Kalsaria, K., Kotagiri, V., Purkar, A. B., Anjanappa, M., & ... (2012). Microwave and magnetic (M2) proteomics of the experimental autoimmune encephalomyelitis animal model of multiple sclerosis. *Electrophoresis*, 33(24), 3810-3819.
- Salzler, R. R., Shah, D., Doré, A., Bauerlein, R., Miloscio, L., Latres, E., & ... (2016). Myostatin deficiency but not anti-myostatin blockade induces marked proteomic changes in mouse skeletal muscle. *Proteomics*, 16(14), 2019-2027.



- Shah, D., Anjanappa, M., Kumara, B. S., & Indires, K. M. (2012). Effect of post-harvest treatments and packaging on shelf life of cherry tomato cv. Marilee Cherry Red. Mysore Journal of Agricultural Sciences.
- Shah, D., Dhanik, A., Cygan, K., Olsen, O., Olson, W., & Salzler, R. (2020). Proteogenomics and de novo sequencing based approach for neoantigen discovery from the immunopeptidomes of patient CRC liver metastases using Mass Spectrometry. *The Journal of Immunology*, 204(1_Supplement), 217.16-217.16.
- Shah, D., Salzler, R., Chen, L., Olsen, O., & Olson, W. (2019). High-Throughput Discovery of Tumor-Specific HLA-Presented Peptides with Post-Translational Modifications. MSACL 2019 US.
- Srivastava, M., Copin, R., Choy, A., Zhou, A., Olsen, O., Wolf, S., Shah, D., & ... (2022). Proteogenomic identification of Hepatitis B virus (HBV) genotype-specific HLA-I restricted peptides from HBV-positive patient liver tissues. *Frontiers in Immunology*, 13, 1032716.
- Big Data Analytics using Machine Learning Techniques on Cloud Platforms. (2019). *International Journal of Business Management and Visuals*, ISSN: 3006-2705, 2(2), 54-58. <https://ijbmv.com/index.php/home/article/view/76>
- Pavan Ogeti, Narendra Sharad Fadnavis, Gireesh Bhaulal Patil, Uday Krishna Padyana, Hitesh Premshankar Rai. (2022). Blockchain Technology for Secure and Transparent Financial Transactions. *European Economic Letters (EEL)*, 12(2), 180–188. Retrieved from <https://www.eelet.org.uk/index.php/journal/article/view/1283>
- Challa, S. S. S., Chawda, A. D., Benke, A. P., & Tilala, M. (2023). Regulatory intelligence: Leveraging data analytics for regulatory decision-making. *International Journal on Recent and Innovation Trends in Computing and Communication*, 11(11), 1426-1434. Retrieved from <http://www.ijritcc.org>
- Fadnavis, N. S., Patil, G. B., Padyana, U. K., Rai, H. P., & Ogeti, P. (2021). Optimizing scalability and performance in cloud services: Strategies and solutions. *International Journal on Recent and Innovation Trends in Computing and Communication*, 9(2), 14-23. Retrieved from <http://www.ijritcc.org>



- Challa, S. S. S., Tilala, M., Chawda, A. D., & Benke, A. P. (2021). Navigating regulatory requirements for complex dosage forms: Insights from topical, parenteral, and ophthalmic products. *NeuroQuantology*, 19(12), 971-994. <https://doi.org/10.48047/nq.2021.19.12.NQ21307>
- Fadnavis, N. S., Patil, G. B., Padyana, U. K., Rai, H. P., & Ogeti, P. (2020). Machine learning applications in climate modeling and weather forecasting. *NeuroQuantology*, 18(6), 135-145. <https://doi.org/10.48047/nq.2020.18.6.NQ20194>