WASH SECTORAL PLAN REVIEW

Background

Efforts to improve access to clean water and sanitation have existed for decades, which have been spearheaded by local authorities or international organizations like UNICEF. In the initial stages WASH was not a formally named program in Pakistan. The floods in 2010 proved to be a turning point for the interventions in the department of water, sanitation and hygiene.

In 2010, after the floods, PATS (Pakistan Approach to Total Sanitation) was formalized by the government stakeholders to counter the problems related to water, sanitation and hygiene, specifically prevalent in the flood affected areas. The focus of PATS was limited to the community and school ownership along with behavior change. It targeted rural areas to tackle the malpractices of open defectation. Later, PATS evolved into the formal WASH program of Pakistan widening its implementation and focus areas to tackle problems related to sanitation and hygiene.

WASH developed into a national level program with its implementation in all the provinces of Pakistan. Initially being funded by the NGO's and international agencies like UNICEF and WaterAid, WASH gained popularity. Technical and administrative support was also provided by the donor agencies in the early phases.

Current Situation

The latest report by WaterAid (2017-2018) describes the current scenario of WASH Pakistan in the form of multiple facts and figures. It highlights that almost 89% of Pakistani population has access to drinking water, while 58% have direct access to sanitary and around 60% to hygiene.

The report further states the following "National Water Facts":

- Around 21 million people lack access to clean water close to home
- Pakistan is currently among the top 10 countries which have the greatest number of people living without a direct access to safe water.
- In Pakistan 4 out of 10 schools lack in the drinking water facility.
- Around 79 million people lack a decent toilet facility.
- Almost 11.5% of individuals defecate in the open.
- Only 8-9% of wastewater is treated while the rest of it is released into the rivers and drains untreated.

The report also revealed the following "National Hygiene Facts":

- Around 46% of Pakistani population does not have a handwashing facility at home which includes soap and water.
- Similarly, only 23% of households have a garbage collection facility at home.
- In urban settings, around 57% of urban households have a garbage collection facility at home.
- In rural set-ups, not more than 6 % of households have a garbage collection system.

All these above-mentioned facts and figures show a devastating scenario of the water, sanitation and hygiene condition of Pakistan. It is not just limited to these figures in fact it has another side of

implications attached to it which vary in severity but affect society at multiple levels. These may be positive or negative but leave a long-lasting mark on society. The following implications have been identified as the most prominent ones having a national level effect.

Around 19,500 children, under the age of five, die every year from diarrheal related diseases and disorders. It was also seen that at least 50% of malnutrition cases were associated with repeated diarrhea or intestinal worm infections caused directly due to the inadequate WASH. On the other hand, in the report it was also observed that improved water sources reduce diarrhea morbidity by at least 21%, and interestingly a simple act of handwashing at critical times like before meal and after any outdoor activity, reduce the number of diarrhea cases by up to 35%. Similarly, 43% reduction was observed in the school absenteeism due to a better health condition which was linked to frequent handwashing with soap.

Urban WASH Behavioral Determinants

As UNICEF has always played an active role in the WASH program in Pakistan it has also been involved in reviewing its efforts as part of a larger commitment towards promoting health and uplifting living conditions for humans around the world.

In this content, UNICEF conducted a review to identify various determinants related to Urban WASH program in Pakistan which play as drivers in some settings and as well as barriers in other settings when it comes to water, sanitation and hygiene practices. The identified behavioral determinants were categorized into two groups as primary and secondary determinants.

Primary determinants were described as the activities which were significantly related to being a doer or non-doer while secondary determinants were described as the activities which were either linked directly or in-directly to being a doer or non-doer but had a significant association with the primary determinants.

Four major behaviors were analyzed which were as follows:

Behaviour#1: Household seek clean water solutions for drinking water and personal hygiene

With an estimated number of 79% active doers, this behavior had multiple primary determinants like marital status, gender, presence of treatment, income of household, sources of water, sickness & other consequences and number of sources. It was observed that married couples tend to show a positive incline towards this behavior, similarly female showed the same behavior trait as married couples. Astonishingly, also seen that the treated water was preferred by most individuals and astonishingly the low-income households showed a positive attitude towards this behavior. Public tap, against the other sources, was picked as a most used option by the majority and during the sickness the individuals were seen keenly seeking clean water solutions for drinking and personal hygiene.

The secondary determinants like cost, ease of access, household decision makers, perception of safety and various environmental factors significantly contributed to making up the mind of most of the urban population who were recognized as doers. These factors also influenced the primary determinants as an association among them was observed.

Behavior#2 Consumers install a septic tank in their household/community

The presence of septic tanks, having a collection system or a piped system for sanitation proved to be a primary determinant for such behavior. The presence of such a facility determined if the household would upgrade it and its absence determined if the household would even opt for such a facility or not.

Secondary determinants like the cost of installing such a facility played a major role as most of the middle and low-income households are already struggling with finances on a day-to-day basis. Similarly, physical & social opportunity, motivation health benefits and reflective motivation were the other secondary determinants which played a detrimental role in strategizing the impact of primary determinants on the population.

Behavior#3 Consumers keep the environment around the house free of uncollected solid waste

Such a behavior was determined by various primary determinants like the willingness to pay, it was seen that majority of the households were willing to pay for the removal of solid waste. Interestingly, the practice of behavior #2 proved to play a pivotal role, as the ones who were having septic tanks or related facilities in their households were quite keen in having a clean environment around their house by keeping it free of the uncollected solid waste. The majority also believed that the government should pay as compared to other donor agencies or the households themselves.

The secondary determinants like cost, cleanliness, community pressure, and quality of service of the garbage collecting companies/vendors, also contributed both positively and negatively in practice of this behavior by the urban population. Another important set of secondary determinants included the ownership of the property which the individuals were living in, residing in own house/property always contributed to having a positive approach towards cleanliness and removal of solid waste while those residing in rental properties didn't much care about the environment in their surroundings. Finally, empty lots in the vicinity always contributed negatively as the residents living in the area were always seen piling it up with solid waste rather removing any of it.

Behavior#4 Consumers engage with service providers and actively hold them accountable for providing quality, affordable and reliable WASH services

The impact of this consumer behavior was validated through various primary factors which included community meetings, In-person meetings and based on belief of customers that their complaint has an effect. Similarly secondary factors included reflective motivation, physical capability, paying services providers, social opportunities, psychological capabilities and physical opportunities.

Urban WASH Behavioral Recommendations

Behavior wise recommendations were also provided to uplift the ongoing projects in the WASH movement precisely in the urban areas. It was specifically recommended that UNICEF and various other donor agencies should support and implement safe water programs which will establish it as a social norm. Focus on SBCC (Social & Behavioral Change Communication) was emphasized by expanding its scope and strategizing its focus areas in the future. Similarly, these programs encouraged to engage with the people at household, community and service providers' level.

In other areas, further research on several drivers (factors) was recommended as part of effective future planning. As previously observed the service providers were not clearly communicating regarding the sanitation and hygiene protocols, so they were advised to make contact at the right and time with the consumers and transfer the right amount of information regarding solid waste management. To counter the problem of burning waste, service providers were recommended to offer alternative actions of disposal and make a timely intervention to prevent such malpractices which may be harmful for the environment and society.

Furthermore, service providers were encouraged to engage the community by providing more access to safe water. It was also stressed that the service providers should establish complaint cells and provide an opportunity to the consumers to express their grievances directly without any hassle. Finally, service providers were appreciated and encouraged to continue their planned community gatherings to engage the maximum number of consumers.

WASH Laws, Policies, Strategic Plans, & Adaptation of WASHREG

In 2023, a gap analysis study was conducted by the UNICEF itself which included an in-depth analysis of various laws, policies, and regulations related to WASH in all the provinces of Pakistan. This study was based on the UNICEFS WASHREG approach, and it had three stages, which included: desk-based review, discussions with key stakeholders at both federal & provincial levels, and lastly a workshop which involved a wider array of stakeholders.

WASH Laws

It is an understood fact that water sanitation and hygiene fall under the basic human rights, and these should individually be addressed for drinking water and sanitation. In this regard the study assessed at least twenty-one laws at multiple levels (federal & provincial). A substantial absence of human rights perspective was observed in all the laws which were assessed. Furthermore, important factors like accessibility, affordability, reliability and sustainability were not considered in the development and implementation of such laws.

Federal WASH Legislation

There are four laws implemented at federal level which include: (1) The Factories Act 1934 (FA 1934), (2) WAPDA Act 1958 (WA 1958), (3) Indus River System Authority Act 1992 (IRSAA 1992) & (4) The Accessibility Code of Pakistan 2006 (ACP 2006). It was observed that the IRSAA 1992 lacked the element of affordability. Similarly, other acts, on the federal level, also miss out on specifying the amount being charged to marginalized groups making it difficult to achieve equality and ability to afford other necessities of life.

Looking into the other factors we see that all these federal acts also fail to deal with the stigmatization and taboos associated with women and girls during their menstruation which leads to the lack of acceptability of these in the masses. On the other hand, these acts do not clearly demand that the state or the relevant authority stay away from interfering with the full-fledged practice of the right to water and sanitation which renders it not so user friendly. It should also be mentioned that none of these acts mention water as the basic human right. When it comes to sufficiency, except IRSAA 1992, no other act clearly demands the state or the relevant authorities that the water should be sufficient and continuous for both the domestic and personal use.

Khyber Pakhtunkhwa WASH Legislation

In Khyber Pakhtunkhwa, there are four laws which are directly or indirectly related to WASH which include: (1) Khyber Pakhtunkhwa Factories Act 2013 (KPFA 2013), (2) Khyber Pakhtunkhwa Local Government Act 2019 (KPLGA 2019), (3) Khyber Pakhtunkhwa River Protection Ordinance 2002 (KPRPO 2002) & (4) Khyber Pakhtunkhwa Water Act 2020 (KPWA 2020).

If we start with the availability, we see that all the laws related to WASH in KPK fail to address the availability of hand washing facilities, they also lack any kind of reference to the menstrual hygiene management. Similarly, these laws have no mention of the affordability and the impact of WASH services on affording the other necessities of life, just like the federal laws.

Interestingly on the matter of physical accessibility, except KPWA 2020, no other law addresses the issue of physical accessibility of the water and sanitation services. Furthermore, no consideration has been given to the special group with reference to the accessibility of the WASH services. Just like the federal laws, all the KPK laws regarding WASH, except the KPWA 2020, fail to consider the requirement of acceptability and again, have failed to cater the stigmatization and taboos associate with women and girls during menstruation. Similarly, except KPWA 2020, no other act talks about sufficiency, safety and sustainability of the WASH services. None of these acts deal with the collection, transportation, disposal and treatment of human waste.

Punjab WASH Legislation

The government of Punjab has six laws in place which are directly or indirectly relevant to the WASH, namely: (1) Punjab AAB-E-PAK Authority (PAA) Act 2019, (2) Punjab Environmental Protection Act (PEP) 2012, (3) Punjab Local Government Act (PLG) 2022, (4) Punjab Soil Reclamation Act (PSR) 1952, (5) Punjab Water Act (PWA) 2019 & The Canal and Drainage Act 1873. It was observed that none of the above-mentioned laws directly addressed the availability of the water and sanitation services to the masses except the PLG Act of 2022 which requires different councils to make sure the availability of sanitation facilities. On the other hand, PWA 2019 categorically mentions of the sewerage services to be provided to masses for domestic purposes.

Similarly, no law specifies the factor of affordability with regards to the marginalized groups. Few laws like the PSR Act 1952 and PLG Act 2022 do state the implementation of tax and to use it for projects, services or activities which may or may not be related to WASH. The laws also do not set any limit to the maximum amount charged to the households which means that it fails to ensure equal affordability of the water.

When we analyze the factors of physical accessibility, safety, sufficiency, and water as a right we see that no related law addresses all these factors specifically because of which the public is denied its basic rights. A few exceptions are observed like the act of PLG 2022 and PWA 2019 which puts a responsibility of the local government to make the reservoirs safe for water storage. These laws also provide the right to water and sanitation to the disabled, chronically sick and old age individuals of the society. Local government has also been given the responsibility to maintain separate latrines for the use of each sex and to keep it cleaned and maintained in terms of acceptability.

The user friendliness of WASH services is mentioned in the acts of PWA 2019 by making the authorities responsible enough to not to cut the water supplies of non-payment users without

serving a notice, and in case of any project or work on the water line, it is made necessary to cut the supply line for as short as possible to provide uninterrupted services and facilities to the consumers. Similarly, the PEP Act of 2002 makes the relevant council/body take necessary measures to reduce pollution and to improve the environment by taking all the appropriate actions. At the same time this act also makes the compulsory for every individual of society not to dump waste or effluent material which may be harmful.

The PWA 2019 and PLG 2022 make the state and concerned departments, either private or public provide wholesome water for both domestic and non-domestic purposes to the masses which falls under the factor of safety regarding WASH. Other factors like compatibility, participation and accountability can also be found in various legislations and acts devised by the provincial Government of Punjab.

Sindh WASH Legislation

Two major laws fall under the banner of WASH directly or indirectly in the province of Sindh which include: Sindh local Government Act 2013 (SLGA 2013) and Environment Protection Act 2014 (EPA 2014). When we talk about availability, only the SLGA 2013 relates to this factor as it highlights the duties of various local government bodies regarding the water supply. It emphasizes these government bodies to regularly inspect and regulate all the water supplies present in the area. Similarly, only SLGA 2013 regards the matter of affordability by giving right to the government to manage the public drains in accordance with council and subject to various fees.

Interestingly no law deals directly with the physical accessibility of water to the public knowing the fact that Sindh is already a water scarce province and cities like Karachi, which form the coastal area, are affected as much as the internal areas of the Sindh which are dry and barren. Again, like other provinces, the law of Sindh lacks the element of acceptability, user-friendliness, sufficiency and safety which form the basis for any basic WASH requirements. If we analyze the factors of water as a right, participation and accountability we see that these concepts are alien to the water and sanitation related laws of Sindh.

Balochistan WASH Legislation

Just like Sindh, two major laws are directly or indirectly involved in the WASH legislation in Balochistan which include Balochistan Local Government Act 2019 (BLGA 2019) and Quetta Water and Sanitation Authority Act 2004 (QWSAA 2004).

On analyzing various parameters and matrices, a UNICEF report concluded that both the laws of BLGA 2022 and the QWSAA 2004 have sections which address the problem of availability but there is one short coming as one law, QWSAA 2004, is Quetta specific which renders the whole province of availability of basic water and sanitation needs. It is also observed that section 89 of BLGA 2022 makes the government responsible for providing water supply, lighting along with drains and sewerage facilities to the public. It also gives power to the government to devise a council which can further take up the responsibility of regulating and inspecting the water supplies.

Surprisingly, the BLGA 2022 which is an updated version of BLGA 2019 with specific amendments addresses the factor of affordability as well as its section 114 directly deals with the imposition of taxes on the union councils and includes any rate for the development and implementation of public

utilities including drainage and water supplies. Similarly, the QWSAA 2004 holds the same criteria under its section 12 & 15 where it states that the government has the right to collect revenue/fee/tax for the services it is providing regarding the water and sanitation. QSWA also holds section 11 which gives the authority the power to function in terms of providing water and sanitation services to meet the health needs of the public, this also falls within the parameter of acceptability.

Sufficiency of water supply is addressed under the QWSAA 2004 in its section 12 where it states that it will initiate, establish, and maintain all the construction and planning for the water and sanitation systems in the area but again as this legislation is related to only the region of Quetta it is not enough to address the problems of the whole province.

Other parameters like physical accessibility, sustainability, water as a right, compatibility, accountability are not present in the above legislations which deal with WASH.

WASH Sector Policies/Strategic Plans

All over the world, after the introduction of SDG's (Sustainable Development Goals) it was made obligatory for every UN member nation to inculcate the SDGs in their system. Similarly, the 6th SDG was developed in line with the WASH principles. After a detail analysis we may conclude that the laws, legislation and policies in Pakistan clearly lack the implementation and addition of 6th SDG in their WASH related agendas and sectoral/strategic plans.

In the human rights perspective, it has been observed that the WASH has provided enough awareness at a national level that all provinces recognize the basic human right of safe and clean drinking water along with sanitation services. On the other hand, it can also be observed that the WASH services have been unsuccessful in making this right an obligation, in terms of implementation, upon the provincial governments.

Climate resilience is also a major component of every WASH sectoral and strategic plan now. Federal government with its Climate Change Policy 2021 showed its commitment towards the said aspect of WASH. Similarly, KPK and Punjab also formulated their own policies on climate change. Interestingly two major components of WASH climate resilience 'Disaster Resilient WASH infrastructure' and 'Water Governance' were not addressed in these policies. Eventually on further analysis it was observed in an UN report that various policies reviewed on national and provincial level do not adhere to WASH related climate resilient parameters.

The policy problems do not just end here, the institutional fragmentation along with overlapping mandate strikes down the 2015 development agenda rendering the recognition of WASH as a basic human right. It can also be seen that the lack of coordination, water management issues among provinces and lack of solid communication among the stakeholders is leading the WASH regulations towards further complications and the situation is only deteriorating. Indus River System Authority (IRSA) does exist and holds the mandate for coordination among provinces for water distribution but if the institutional fragmentation there will be no integrated role of IRSA at any point of time.

Data driven decisions has been encouraged by WASH policies on both national and provincial levels but then again, the implementation lacks which hinders the acceleration of integration of SDG-6 with WASH services in the country. Even though all the policies advocate for capacity development of WASH related institutions however they are silent and do not support the enhancement of capacities

in technology, scientific research and engineering which is need of the hour. Then again, data drive and technologically advanced decisions are talked about everywhere at different forums along with their inclusion in policy, but the implementation lacks as always.

WASHREG

WASH regulation, also known as WASHREG, is currently lacking in ICT, G-B, AJ&K, Baluchistan, and Sindh. Although Punjab and Khyber Pakhtunkhwa have introduced water Acts, their regulatory bodies are not yet operational. Both Punjab and Khyber Pakhtunkhwa need to activate their regulatory authorities. The Federal Government, along with the provinces of Balochistan and Sindh, should establish a comparable legal framework. Khyber Pakhtunkhwa's advancements in implementing WASH regulation could serve as a model for other provinces.

However, there is a challenge faced by each of these provinces: WASH management is divided between PHED (Public Health Engineering Department), LGs (Local Governments), and WASAs (Water and Sanitation Agency), while the Water Acts fall under the jurisdiction of irrigation departments which makes it a matter of conflict. This situation leads to confusion and hinders progress in WASH service delivery. A practical solution to unravel this complexity can be borrowed from Punjab Province. There, the proposed Water Resource Commission, led by the Chief Minister, will ensure that each department—whether Irrigation, LG, or PHED—has an equal voice and vote on matters related to WASH and water governance. Additionally, it has been suggested that Punjab's Water Act be placed under this commission, streamlining WASH services and reducing institutional fragmentation.

Additionally, these Water Acts include provisions for establishing regulatory authorities in both Khyber Pakhtunkhwa and Punjab. It is essential to operationalize these authorities by setting up rules and regulations, as well as providing the necessary financial and human resources for their independent functioning. Once these authorities come into play it will be an effective approach in implementing WASH regulations.

Way Forward

The UNICEF report conducting the gap analysis also provided some recommendations which may be implemented to achieve the desired results from WASH program in Pakistan. These suggestions were forwarded keeping in mind the current ineffective and non-operational components of WASH which need to be addressed immediately. Following are the major interventions:

- Strong water, sanitation, and hygiene (WASH) regulatory bodies should be established in the
 provinces of ICT, Gilgit-Baltistan, Azad Jammu and Kashmir, Balochistan, Punjab, Khyber
 Pakhtunkhwa, and Sindh and these should follow the steps outlined by the international
 bodies. These actions, which are crucial for success, should be further divided into specific
 tasks for each department within the Pakistani government.
- Although we're implementing WASH regulations nationwide, we need to focus on one
 province as a model. It is suggested that Khyber Pakhtunkhwa should be set as an example
 for how to effectively run a WASH regulatory authority. Khyber Pakhtunkhwa can serve as an
 example for the other provinces to follow. They're prepared to start implementing their water

- regulations, including WASH, in December 2023. Punjab, on the other hand, still needs to establish its regulatory authority based on its Water Act.
- To improve water, sanitation, and hygiene (WASH) governance across Pakistan, we need a unified approach as suggested in various reports and gap analysis. This means working with service providers to fill the gaps in WASH management. The current division between the Public Health Engineering Department (PHED), local governments, and Water and Sanitation Agency (WASAs) is hindering effective planning and service delivery. Interviews with key stakeholders show that we need a dedicated department to manage water resources and WASH. It is recommended that each province consider creating a Department of Water Resource Management. This department would oversee all water-related functions, from irrigation and agriculture to industry, PHED, and local government departments, including WASAs. Although challenging, changing our government structure is possible. However, the regulatory authority should remain independent and oversee all these matters.
- To effectively manage water for irrigation, agriculture, industry, drinking water, sanitation, and hygiene, provincial governments should consider creating a dedicated water resource management department. This department would oversee all essential functions. Khyber Pakhtunkhwa's progress in establishing its water regulatory authority can serve as an example for other provinces to follow.