Synthesis Document: The intricate relationship between water and sanitation

India Sanitation Coalition, IRC and Taru Leading Edge recently organized a new dialogue under the ‘Insights’ series to understand the importance of having adequate water to ensure sustainable sanitation.

India is working towards achieving Open Defecation Free (ODF) status by October 2nd, 2019. Over the years, several steps have been taken by various stakeholders to fulfill this objective. Since the launch of the Swachh Bharat Mission (Gramin) on October 2014, 7.23 crore individual household Latrines (IHHLs) have been constructed, which takes the national sanitation coverage to 84.59 percent[1]. Under the SBM (G), the major thrust has been on construction of toilets without ensuring adequate availability of water. This is a fundamental aspect in which lies the attainment of sustainability and usage of these toilets. Water and sanitation are inextricably linked and cannot separate one from the other and they have to be managed in a conjunctive manner.

Toilets do not cover the breadth of the sanitation challenge. The provision of toilets is a necessary first stage but it is by no means the complete answer to addressing all aspects of the issue. Sustained usage of these toilets will not be possible unless there is continuous and adequate supply of water. If access to water is erratic or absent then there is no water available for daily activities like ablution, flushing, hand-wash or even cleaning. India is already struggling to cope with chronic water shortage and the inadequacies within its existing water infrastructure. More than 600 million people face acute water shortage in the country with 84% of rural households not having access to piped water. Moreover, 70% of India’s surface water is contaminated2 and other critical groundwater resources that account for 40% of water supply is being depleted rapidly at unsustainable rates.
It is estimated that by 2030, the demand for water in India will exceed its supply by a factor of two, resulting in severe water scarcity for hundreds of millions. With basic needs unmet and the human right to water and sanitation remaining unrealized for a large section of the population across the country, it would prove to be a huge deterrent for the existing programs that are working towards making India open defecation free (ODF) in the panchayats, villages and cities.

Ensuring Sustainability of Sanitation Programmes

For sustaining the ODF status in India, the sanitation programmes should be designed with special emphasis on establishing sewage infrastructure. This should include safe handling and disposal of waste along with integrating the following water related aspects:

**Adequacy:** Providing easy access along with sustained and sufficient quantity of water in an equitable manner

**Quality:** Enhancing the sanitation coverage with improved water quality and emphasizing on quality protection and prevention of contamination

**Reliability:** Establishing and strengthening access to improved sanitation services including water security and availability

**Affordability:** Ensuring inclusiveness for both urban and rural populations with equitable accessibility

Dialoogue on the Importance of Water for Sanitation

India Sanitation Coalition, IRC and Taru Leading Edge recently organized a new dialogue under the ‘Insights’ series to understand the importance of having adequate water to ensure sustainable sanitation.

The dialogue on Water for Sanitation was held at the FICCI Federation House in Delhi on 27th April 2018. Hosted as a part of ISC-FICCI Sanitation Awards and Conclave 2018, this deliberation had a robust participation with Mr. Nitya Jacob (SuSanA India Coordinator) as the moderator. The other panelists included – Ms. Meena Narula (Country Head, Water for People), Mr. Raghava Neti (Senior Infrastructure Specialist, World Bank), and Mr. Amit Arora (Journalist, Doordarshan).

The initial discussion focused on the essentials and necessity for water security from a sanitation perspective. The panelists stressed on the need for holistic planning right from the start phase of any programme implementation. While toilets are a fundamental part of overcoming the sanitation challenge, they are the means not the end of the sanitation challenge. They will only deliver the results when coupled with measures. To attain success with the current problems with regard to water and sanitation, the aim is to encourage new thinking and find ways of achieving the same results in a much more effective and sustainable way.

"Water is provided by a particular and sanitation by another. The various institutions have to converge to achieve the desired outcomes. The focus should be on integrating the two to meet long term objectives." - RAGHAVA NETI
**Understanding the Gaps and Challenges**

The panelists discussed the existing problems with sanitation coverage especially with regard to water. It was observed that intervention strategies and their implementation in Indian context is a big hurdle. The need of the hour is to identify the gaps in existing system of sanitation with respect to its structure, functioning and to prioritize the control strategies according to the need of the country. The panel thinks that the following are some of the major challenges encountered at the ground level include:

**The Current Implementation Plan that is Drafted Annually in all the States** across India primarily focuses on the number of toilets that needs to be built instead of ODF sustainability and provision of improved services. It is perhaps the right time to critically evaluate and move beyond the excessive attention on ‘provision’ and pay attention to the underlying complexities that influence sanitation behaviour among people. The focus should be on providing basic services along with toilets for long-term sustainability instead of just achieving short-term objectives.

**From a Sanitation Perspective, Water as a Resource Needs Attention.** The vital aspect of this issue relates to adequacy and lack of availability of water for daily use. The other is creating the infrastructure like piped lines that would help keep the toilets function. The lack of understanding and segregation within homes about potable drinking water and domestic use is another developmental area.

**The Ministry of Drinking Water and Sanitation (MDWS)** is responsible for implementation of rural water and sanitation related programmes across India. However, the lack of coordination and convergence between the many programmes on water and sanitation remains a huge execution challenge that ultimately impacts both, the reach and success.

**Sanitation Programs Often Do Not Lay Emphasis on Community Engagement.** The lack of involvement from the community, particularly women affect the attainment of the laid objectives of the water and sanitation programmes and consequently influences their sustainability.

**As per Global Statistics, Only 17% of Global Water Resource Management Plans Include Women.** According to UNICEF, women and girls across the world totally spend about 200 million hours every day to collect safe water. Estimates show that they have to collectively travel 90 billion hours to go to a safe place to defecate. The undignified life of millions of of women who have no place to defecate or urinate and have to do it without conditions of safety, hygiene, privacy or dignity is often ignored. The big question for policy makers is to acknowledge the burden on girls and women and focus of addressing their needs while designing and planning for sanitation coverage.

**Although Many Areas Provide Access to Toilets, Most Often Their Upkeep Is Questionable.** The Septage is not well managed and sewage is discharged untreated. This has led to 70% of India’s surface water resources and a growing percentage of its groundwater reserves to be contaminated by biological, toxic, organic, and inorganic pollutants, rendering them unsafe not only for human consumption but also for other activities, such as irrigation and industrial needs.

**Lack of Household Water Quality Management to Complement the Continuing Expansion of Coverage and Upgrading of Services is Erratic.** Addressing this gap would be an effective intervention in many parts of the country.

**The Programmes Designed for the Sanitation Ecosystem Need to Be Financially Viable** and must employ and integrate environmentally sustainable technology to address sanitation challenges in hilly regions, flood prone areas and places that have a high water table.

**The Way Forward**

The consequences of poor sanitation can be devastating on both, human health and the environment. Sanitation has to include integrated water resource planning and management for avoiding contamination and ensuring sustainability. Their needs to be a multi-pronged strategy...
that includes infrastructure development and community engagement to make sure that there is maximum coverage. The sanitation challenges require urgent attention and the panelists enlisted certain actionable points that would guide the way forward in achieving the desired results in the sanitation space.

**INSTITUTIONAL AND PROGRAMMATIC DELIVERY**
The different stakeholders working in the sanitation space have admitted that the government and various other agencies to tackle the problem of sanitation have taken significant strides, and although these efforts are yielding positive results, a lot still remains to be done.

**STRENGTHENING INSTITUTIONAL RESPONSE** and improving the coordination & convergence between water and sanitation programmes across various stakeholders including government (at different levels) and other agencies will go a long way in creating sustainability and hence a wider impact

**INVOLVING AND ORGANIZING WOMEN TO BECOME MEMBERS** of the water user committees and train them to manage water resource for domestic and drinking purpose use. Helping them understand this segregation helps them to do water planning and encouraging the use of toilets

**PLANNING AND IMPLEMENTATION OF WATER AND SANITATION SYSTEMS** should take into account the native challenges and problems of the community and envisage solutions in accordance with the local context of water and sanitation

**THE WAY FORWARD IS TO PROMOTE AND DESIGN A HOST OF TOILET** technology options that encourage usage, promote efficient use of water and have a sewage treatment plan

**EFFORTS NEED TO BE MADE TO ENSURE CAPACITY BUILDING AND TRAINING OF HUMAN RESOURCES** at all levels in the sanitation value chain. This is absolutely necessary to not only influence user behaviour but will also ultimately have an impact on long-term success of any program in the space

**PARTNERSHIPS WITH THE PRIVATE SECTOR** will also help augment sanitation planning and implementation

**IMPROVING PARTICIPATION FROM KEY STAKEHOLDERS** (community, politicians, local government, implementing institution) during all the phases of the sanitation value chain: planning, implementation and post-implementation of policies, programs and services.

For effective and successful deployment or Improvement in sanitation services requires newer strategies and targeted interventions with follow-up evaluation. Regular monitoring of usage and presence of a robust feedback mechanism is absolutely mandatory.

**COMMUNITY ENGAGEMENT**
There is a dire need to shift to community-based management approach because local authorities are in daily contact with user. The local context allows for more efficient and effective responses to local conditions and institutions and groups are better equipped to solicit better participation in sanitation activities. The panelists enlisted the following ways in which community engagement can be augmented:

**LOCAL WATER RESOURCE MANAGEMENT** is very important in strengthening the use of sanitation services. Conducting water budgeting exercises with communities will aid water planning and usage of toilets among native groups

**INSTILLING A SENSE OF PRIDE AND OWNERSHIP** within the community that their district is open defecation free. The community also needs to pressurise the local bodies to build the infrastructure to support water security and sanitation

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Toilets are an essential part of overcoming the sanitation challenge, however merely constructing them is not enough. Sustained access to water to keep them functional and influencing a behavioral change are equally important for avoiding ODF.

AMIT ARORA

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TO BRIDGE INDIA’S GAP IN SANITATION PRACTICES, IT IS IMPERATIVE TO INVOLVE WOMEN IN THE PROCESS. They need to be involved at every level; right from being a part of water user committees, educating and engaging them to manage water for domestic use as well as providing access to drinking water. Simultaneously, active efforts have to be made to address the issue of accessibility and availability of water for toilet usage.

ENCOURAGE WOMEN TO BECOME JALBANDHUS who encourage others in the community to use toilets. It would be highly beneficial to empower women by setting up enterprises for O&M of water points to ensure that if there is a breakdown in water services, they were self-reliant to fix it and hence toilet usage was not impacted.

WOMEN EMPOWERMENT IS CRITICAL TO THE SUCCESS AND REACH of water and sanitation programs. This is only possible when they are empowered to be a part of local systems so that they find representation and their needs are addressed.

EFFECTIVE IEC CAMPAIGN is necessary for propagating safe sanitation practices, efficient use of water use, safe disposal of waste etc.

MEDIA CAN PLAY A PIVOTAL ROLE in supporting sanitation agendas across the country. This can be achieved through strategic partnerships, engagement, capacity building and using them for creating accountability among the various stakeholders. Sanitation practices including publishing of case studies and best practices will greatly benefit the whole ecosystem.

CONCLUSION
A number of factors have been found to play an important role in determining the efficacy of toilets. Sticking to toilet-using habit depends on construction aspects such as a good and well maintained, user friendly structure that protects privacy, has availability of water and where the owners are aware of the benefits of good sanitation. The first step over the years was to build toilets, the next was to connect them to treatment systems but the bigger glaring issue today is that of functionality. Toilets will be usable only if there is assured supply of water and for sustainability adequate access and supply is critical.

It is critical to set up developmental goals, monitor and track them to determine coverage and impact. Operational aspects such as well-defined institutional roles and mechanisms, appropriate plans for management of funds, coordination between the departments to deal with all the aspects of sanitation, empowerment and capacity building of people within these institutions and use of improved and appropriate technologies have also been found to be important determinants for improving sanitation outcomes.

“IT IS CRITICAL TO HAVE AN INCLUSIVE APPROACH WHEN IT COMES TO SANITATION SERVICES. EMPOWERING WOMEN IS THE KEY, NOT ONLY WILL THEIR VOICES BE HEARD IN AREAS THAT ARE SIGNIFICANT BUT WILL ALSO BRING FOCUS TO THEIR NEEDS AND CHALLENGES, WHICH CAN BE THEN ADDRESSED EFFECTIVELY.

MEENA NARULA