today and tomorrow

December 2017

Special Supplement

WASH

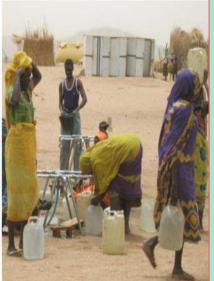
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Economies all over the world depend on basic necessity of water. From industries to agriculture, everything revolves around this element. Specially, primary sector of economy — Agriculture depends on Water. The impact of sanitation, water and hygiene has both negative and positive effects on individuals and their livelihoods. Water, Sanitation and Hygiene (WASH) is Goal 6 of Sustainable Development Goals in Agenda 2030, which states: "To ensure availability and sustainable management of water and sanitation for all." Affordability and Accessibility to WASH is a key public health issue internationally, especially in developing countries. Having safe drinking water and sanitation, along with basic necessities like food and proper nutrition, is of critical importance, and is, in fact, a human right! With the advent of numerous programmes and campaigns, WASH along with food and nutrition has become a key issue in the Sustainable Development Goals (SDGs). United Nations (UN) declared 19th November as World Toilet Day, this month we look at the impact of WASH through the livelihoods lens.

Present Scenario of WASH: In low and middle-income countries, 38% lack of improved water source, 19% do not have improved sanitation, and 35% lack water and soap for hand-washing. 50% of child malnutrition is associated with unsafe water, inadequate sanitation and poor hygiene. There are multiple efforts being taken to cater to this sector, as it is an essential right for any human being. It's very distressing to know the current situation of WASH across the globe under all the three categories of Water, Sanitation and Hygiene. The data below shows the present scenario in the sector under each segment.

Fact Sheet Of Water, Sanitation and Hygiene

Water: Today, 71% of the global population (5.2 billion people) uses a safely-managed drinking water service; i.e., one located on premises, available when needed, and free from contamination. 1 out of 3 of these people (1.9 billion people) live in rural areas (WHO/UNICEF 2017). Global Analysis and Assessment of sanitation and drinking water (GLASS 2017) states that nearly two billion people currently use contaminated water.

- 1. 263 million people spent over 30 minutes per round-trip to collect water from an improved source (UNICEF 2017). Globally, women and children spend around 200 million hours every day collecting water.
- 2. 844 million people lack even a basic drinking water service, including 159 million people who are dependent on surface water.
- 3. Contaminated water can transmit diseases such as diarrhoea, cholera, dysentery, typhoid, polio etc. Contaminated drinking water is estimated to cause 502000 diarrhoeal deaths each year.
- 4. By 2025, half of the world's population will be living in water-stressed areas.

Sanitation and Hygiene:

- 1. 4.5 billion people lack safely managed sanitation services.
- 2. 2.3 billion people still do not have basic sanitation facilities such as toilets or latrines.
- 3. 892 million worldwide still practiced open defecation for example in street gutters, behind bushes or into open bodies of water.
- 4. The world produces more than 3.5 million tons of garbage a day, which is 10 times the amount compared to a century ago, according to the World Bank researchers.
- 5. Hygiene promotion is the most cost effective health intervention (World Bank 2016).
- 6. Data from 70 countries reveal that current levels of hand washing with soap are generally low (UNICEF).
- 7. Menstrual Hygiene: 53% of women report using cloths, 56% women report that they wash and reuse their MHM material.

WASH and Livelihoods: A person's livelihood is a means through which a person earns money and secures the basic necessities like food, water and shelter. The dependence on life is directly linked with Water, Sanitation and Hygiene. There is an interdependency of livelihoods with that of WASH. On one hand, improper sanitation and hygiene leads to decrease in livelihood opportunities, and on the other hand, insufficient water may hamper many livelihoods.

Opportunities lost due to Poor WASH: Lack of proper WASH creates a huge impact on the livelihoods of people and helps lock them into the cycle of poverty and drudgery, which has consequences on the society and national economies. The diseases and time lost due to improper access of WASH prevents many adults from earning their livelihoods and hampers productive engagement especially in the case of women. Globally, women and children spend around 200 million hours every day, collecting water (UNICEF). In developing countries, the women spending

WASH and economics

The impact of poor WASH conditions extend beyond health and education, and impact on the economy through health spending and labour division. If we were able to provide basic, low cost water and sanitation facilities to countries in need, the world could save around US\$263 billion a year. If everyone in the world had access, the reduction in diarrhoea-related disease alone would save \$11.6 billion in health treatment costs, and would generate \$5.6 billion in labour spending (UNICEF).

their time collecting water are missing opportunities to participate in more productive activities. A woman drawing 80 litres of water for her family from a well and carrying it to their home 200 metres away (often uphill from the well) uses approximately 17 per cent of the standard ration of 2,100 Kcal/day just to accomplish this task. Many children, mostly girls, spend hours every day collecting water and miss out on the opportunity to attend school. Not only in the rural scenario, but in urban scenarios the importance of proper sanitation also plays a significant role. The theme of World Toilet Day 2016:"Toilet and Jobs" has demonstrated that loss of productivity due to illness caused by lack of sanitation and poor hygiene practices is estimated to cost many countries up to 5% of GDP. Also, it is estimated that in India, the time spent looking for a toilet or finding somewhere to go in the open costs the economy over \$10 billion every year in lost productivity – 20% of GDP (World Bank Group 2016). The theme was also to show that lack of toilets at work could create several impacts on business through problems in the workforce such as poor health, absenteeism, attrition, reduced concentration and exhaustion. Investing in good toilets at workplace and school would lead to women and girls having safety, dignity.

WASH and Creation of Livelihoods: According to 2016 United Nations World Water Development report, three out of four jobs worldwide are in water dependent. Water is a key factor in the development of job opportunities either directly related to the management of this resource such as supply, infrastructure, wastewater treatment, or in economic sectors that are heavily water dependent such as agriculture, fishing, power, different industries and health. The International Water Association (2014) assessed the capacity gap for trained water and sanitation professionals to achieve universal water and sanitation access across 15 countries to be over 750,000 individuals. The global demand for water and sanitation services is worth over \$50 billion (Freedonia 2013). There are many opportunities and livelihoods created from the sector. It has opportunities for entrepreneurship, for manual scavengers, housekeeping staff, water vendors, employment to the labourers for construction of toilets, employment under MGNREGS for construction of toilets. It has long term business opportunities for the entrepreneurs as few of them have already ventured into it. Opportunities for small scale entrepreneurs and rural entrepreneurs are also immense through this sector.

Apart from this, the proper access to WASH will also enhance the livelihoods of farmers, fishermen and other dependent livelihoods immensely. Especially in the context of India, where agriculture is the primary sector, WASH contributes to the economy and growth of the nation. Additionally, water being the backbone of agricultural activities, sanitation acts as a primary barrier; therefore, removing faces from the environment and preventing faecal pathogens from entering water sources and agricultural fields and from contaminating fly populations is of importance. The wastewater treatment is also essential for utilization in agriculture.

In the 2014 UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS), less than 20% of participating countries have sufficient capacity to meet rural sanitation needs, and even fewer of these countries have plans in place to redress this gap (UN-Water, 2014), which requires investments in education, curriculum development, and enabling environments. Making it easy for people to set up sanitation businesses, as part of a bigger plan, will help entrepreneurs to flourish and could accelerate progress. Particularly in the towns and cities of low income countries, populations are growing fast and their need for toilets and waste removal is already desperate. Small-scale service providers could play a vital role in getting toilets to people quickly, and beginning the transformation of slum areas (WaterAid 2016).

Thus, the benefits of tackling the challenges of water and sanitation are manifold. Improved sanitation leads to lower disease burden, improved nutrition, reduced stunting, improved quality of life, increased attendance of girls at school, healthier living environments, increased job opportunities and wages, improved competitiveness of cities, and economic and social gains to society more broadly.

REMOVING THE STIGMA FROM SANITATION WORK

In 2013, new Indian legislation outlawed the building of any more insanitary toilets and employing people as 'manual scavengers' to clean out human faeces with their bare hands from rudimentary latrines. The practice will take time to eradicate, but as sanitation improves in India, the government is rehabilitating manual scavengers, training them for alternative livelihoods and providing education to their children (UN India 2014). Placing more value and respect for these tasks would also raise the workers' social status.

Community Driven Model to WASH

Though many campaigns related to behavior change have been introduced by the government and International/ national agencies. The community driven approaches/ solutions will contribute to the major implementation of these campaigns and will not only empower the communities' livelihoods by providing jobs, entrepreneurship opportunities, but also it will create ownership among them. Through ownership and community driven approach the potential of behavior change is higher.

Fast Facts

India's Swachh Bharat (Clean India) Mission aims to end open defecation by October 2019.

500 children die every day from preventable diarrhea-related illness.

India loses more than \$106 billion per year of its GDP due to inadequate sanitation.

WASH results in 2017(India)

300,000 more people have access to household toilets.

25,000 communities are open defecation free and healthier.

175,000 more people now have access to safe drinking water.

*(source US aid)

Success stories of Interventions, Innovations and Entrepreneurship in WASH sector

 Water Wheel: This invention has not only made carrying water an effortless activity but has also saved time of women. It also reduced the drudgery. Water wheel is a round wheel shaped storage tanker with an attached handle on top to provide painless mobility. The water wheel can store up to 10 to 50 liters of water in Hygienic conditions.

- Pedalpure: Turning livelihoods into water solutions in Bangladesh. In an innovative new scheme in Dhaka,
 Bangladesh, is turning pedal power into clean water for rickshaw pullers and their families. This initiative was
 put into use as pullers risk their health and livelihoods drinking unsafe water from street vendors during work.
 Each mile of pedalling with Pedalpure will provide 1L of safe drinking water. Pullers travel an average of 25
 miles a day.
- Piramal Sarvajal: A social enterprise which designs and deploys innovative solutions for creating affordable access to safe drinking water in underserved areas. Water ATM is regarded as one of the successful models.
- Svadha: A company establishing an organized WASH ecosystem for rural customers. They create customized and low cost sanitation components and supply them through rural entrepreneurs to ensure a sustainability of sanitation access. The rural entrepreneurs also grow and improve their livelihoods by involving in the activity.
- Contributing in building toilets: Banka Bio Loo, Samitha, Shantilife etc..
- Waste Management: Sahaas Zero Waste, Eco wise, Vermigold, Greenobin, Duro green etc..
- Menstrual Hygiene: Jayashree Industries, Goonj, Sustainable Health Enterprises (SHE), Menstrupedia,
 Firstdigital pad bank.

Few best practices in WASH through CDD approach

- Creating and promoting rural entrepreneurship opportunities through a collaborative model with a hardware shop in towns and cities in order to supply the sanitary items which will facilitate the construction of toilets.
- The production of bricks, readymade pits through their own production setups.
- Production of low cost sanitary napkins at the village level or establishing a pad bank.
- Production of acid, phenyl and other material and marketing through SHG.
- Maintenance of water plant/ starting of own water plants/ water ATMs.
- Awareness campaigns involving youth, women and children through community radio etc.
- Solid waste management and waste water treatment plants managed by the community.

Conclusion: Access to WASH will help drive progress towards the SDGs concerned with poverty, work, economic growth, and it will also help achieve gender equity. In 2015, the United Nations Member states adopted the 2030 Agenda. To ensure the targets are achieved in time and track the progress towards these goals, the member states follow up and review the 2030 Agenda and its 17 goals every year at a High level political forum on sustainability. The event facilitates the sharing of experiences, including successes, challenges and lessons learned. It also provides recommendations for follow up. In the year 2018, an in-depth review of SDG 6 on water and sanitation is one of the goals to be reviewed. Good access to drinking water and sanitation promotes an educated and healthy workforce, which contributes to an essential factor for sustained economic growth. Thus, WASH sector has numerous unseen potentials if the community adopts the community-driven solutions through entrepreneurship. This will also contribute in enhancing people's livelihoods.