COURSE CODE: PGD002

COURSE NAME: POST GRADUATE DIPLOMA IN WATER HYGIENE AND SANITATION

WASH Monthly Assignment 7

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Assignment 1

1. Describe the particular challenges of providing WASH services in urban settings arising from each of the following factors.

* + - * 1. Increasing population size

According to the United Nations population prospects report (2006) the population in urban areas worldwide is factored to grow from 1.9 billion to almost 4 billion. The growing demand will put pressure on the water sources and the cities will be forced to tap into ground and surface sources which are located away from the cities themselves. A good example of such mode of operation could be the drought of Barcelona, where the city had to transfer water from long distances (Independent, 2008). Such factors coupled with climate change induced water scarcity may produce very challenging situations for the cities with heavy population growths.

* + - * 1. The diverse nature of the urban community

The main challenges here will be the low awareness of such communities. The municipalities may be investing many resources in the behavioral changes of the city dwellers by implementing various drivers of change. However, many of the diverse urban communities are characterized by high mobility rates (WASH 7 Module Notes), which means that they will have very small interest in the awareness raising and behavioral change campaigns implemented by the cities.

* + - * 1. Infrastructure required for WASH services

Infrastructural problems will vary according to the type of the urban sprawl and the type of water scarcity. However, generally speaking, the challenges will be concerned with the development of the infrastructure which would enable the city to extract additional water for the increased population. In addition, the increased population size would mean more economic activities which could draw more waste, technical waste, liquid waste, fecal waste, etc. Such wastes are to need specific waste disposal infrastructure, whether it be water treatment plants, etc (WASH 7 Module Notes).

* + - * 1. Governance, in particular the process through which resources for improving WASH services are allocated and utilized.

With increased population and/or water scarcity, the scope of WASH service providers are to increase. If the governance of such increased scope does not provide the expected benefits, or if the gap between the rich and the poor is wide, the WP of the customers will decrease, and the WASH service providers will be left with fewer resources to operate with (WASH 7 Module Notes).

2. What are the major health risks from?

* + - * 1. open defecation

According to WHO, countries with the highest infant mortality have widespread open defecation practice. The fecals are carried into the environment that create sources of bacteria and disease. Floods, water currents, etc. can carry the fecals to different areas of the neighborhoods, contaminate agricultural spaces and get into the food chain.

* + - * 1. allowing food waste and litter to accumulate in a ditch

The major health risk lies in the increase of the vectors. Rats, mosquitos, flies and other types of animals flock such ditches as one of the major food sources, whilst the sources themselves serve as areas of pathogens created due to quick decomposition of foods and other organic litter.

* + - * 1. not washing hands before eating.

Germs like Salmonella, E. coli O157, norovirus etc. can get on our hands through using toilets, touching raw meats or generally things that got contaminated via various vectors (even people sneezing). Washing hands can reduce diarea and other disease by significant percentages (Rabie and Curtis, 2006).

Briefly explain how these risks could be reduced.

All the risks stated above, are mainly concerned with behavior. Therefore, implementing behavioral changes through the theory of change or other tools can be effective. Engaging children to change their behavior can be an effective way of altering behavioral patterns of the adult population (WASH Module 4). Participatory planning, implementing Community based mechanisms and other types of local engagement can prove very effective in creating real impact.

3. Describe three specific challenges posed by peri-urban areas and slums for improving access and utilization of WASH services.

Access to WASH services requires infrastructure and other types of assets. When we are trying to reach peri-urban areas and slums, we are encountering the following challenges:

* The settlements may be illegal, therefore the government cannot install proper infrastructure (Subbaraman et al 2012).
* Provision of continuous assistance with short-term solutions in complex as the settlements are generally difficult to reach due to their location and lack of access to roads (WASH Module 7).
* The poor consumers generally do not have adequate representation. In addition, they can have fear with advocating their needs to the local governments due to their status, therefore, it becomes increasingly difficult to have a legal basis for lobbying and advocacy for their rights (CENN, 2019).

4. Explain three challenges associated with engaging stakeholders in planning and implementing urban WASH projects.

WASH, by its essence is very complex. When implementing WASH projects, there is a need to engage all kinds of stakeholders which can be many. For example, if we are to carry out a WASH project in a school, there is a need to involve the Ministry of Education, the Ministry of Infrastructure, the local municipality, teachers, parents, engineers, lawyers, etc. Therefore challenges in engaging stakeholders vary from project to project. Nevertheless, as many stakeholders gather around a project, it becomes a team work, and working in teams poses different types of challenges, which can be:

* Coordination among the team members – As each team member, or a stakeholder represents a different institution and sets of interests, coordination of such interests and conflicts becomes essential for achieving effective results.
* As noted before, poor representation. In implementing community sensitive WASH projects, local communities, who are mainly mainly marginalized, may experience representation problems or awareness problems, deeming sanitary conditions unimportant. In CENN’s WASH project, we have created WASH councils from local stakeholders in various hot spots. In one of the hotspots, the local community refused to cooperate as they did not think it would me important to implement the WASH project as they had other matters to think about.
* Cross disciplinary communication - is connected in coordinating within the teams. With different disciplines being involved in the projects, different approaches can be put to the table. During one of the WASH projects being implemented in a school, the construction company had a different approach in solving the WASH problems connected to the Bathrooms and the contracted engineer had a different approach. Therefore, it is of utmost importance for the project manager to be aware of the different disciplines presented to make the right decisions.

**Sources**

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