

**Concept note on  
One day seminar on WASH in Emergency Situation  
For the students of B.Tech and MBA Parlakhemundi**

Natural disasters like cyclone, storm surge, flood, earthquake, riverbank erosion and landslide have been threatening mankind since history. With the rapidly rising global population the impact of natural disasters is becoming more severe. Moreover, with the increasing effects of climate change, including sea level rise, the magnitude and frequency of natural disasters like flood and cyclone are apprehended to increase and make people more vulnerable.

If we recall the history of disasters at state and national level, the disasters like cyclone, Sea high tides, abnormal tides, earthquake, tsunami, excessive rains, shortfall of rains, flood, erosion of river, erosion of coastal area, drought, excessive salinity, landslide, hill slide, gushing water from hills, hailstorm, heat wave, cold wave, long term water logging etc.; have greatly hampered the water supply, sanitation and hygiene facilities in the affected areas for a prolonged period, ranging from weeks to months. This very phenomena causing pandemic, such as communicable diseases, diarrhoea, water borne diseases, pandemic influenza, bird flu, anthrax, cholera, jaundice etc.; The recent disasters in Kerela, cyclone Titili in Ganjam and Gajapati have devastated and endangered the water, sanitation and hygienic situation of the people of these two states.

#### **Relevance of WASH**

The impact of disasters and their effects on WASH is often different for rural and for urban areas.

The impact of disaster of any kind, rural areas are much more vulnerable than urban areas. This is because the infrastructure is more affected due to flood and cyclone hit, population are poorer than urban areas and knowledge to cope with the disaster is less. On the other hand, rural areas are vast and majority of the population are living there. So the effect of disaster in respect of magnitude and extent is large. People in most of the cases need to be migrated temporarily to a safe place particularly in the flood or cyclone centers. People live there in a concentrated manner and the need for WASH (Water Supply, Sanitation and Hygiene) facilities on an emergency become very high. Water and sanitation are critical determinants for survival in the initial stages of a disaster. People affected by disasters are generally much more susceptible to illness and death from disease, which to a large extent are related to inadequate sanitation, inadequate water supplies and inability to maintain good hygiene.

#### **Possible intervention**

Emergency WASH interventions should provide access to safe water and sanitation and promote good hygiene practices with dignity, comfort and security (Sphere Project, 2011). The overall aim of all emergency WASH interventions is to promote safe practices that reduce preventable waterborne and communicable diseases

- In order to meet the situation temporary tube wells are to install.
- Mobile water treatment units need to be deployed.
- Water purification tablets are to be distributed.

- For sanitation facilities temporary latrines and solid waste disposal systems are to be provided.
- And to maintain hygienic environment various health and hygiene education materials needs to be provided.
- Cleaning ponds and treating water in a distant fresh water source and trucking to the affected sites or trucking bottle water become necessary.
- Due to staying in the cyclone centre or on the raised land for a longer time, sanitation facilities (latrines) often required de- slogging and disposing them in a safe place.
- In draught non availability of water creates crisis. Installation of new water points with deep set pump or motorized pump become essential to maintain the water supply

**Well or spring repair** – Access to potable water is critical for disaster-affected populations. Existing water sources can be damaged or rendered no longer potable because of a disaster, or can be overwhelmed by a sudden influx of displaced persons. In an acute emergency, there is rarely time for new construction of water points. Thus, the most common water access interventions are to repair or clean existing wells or springs.

**Sanitation** – Sanitation interventions in emergency responses aim to isolate faeces from the environment. Minimising open defecation and ensuring proper management of faeces in a latrine or latrine alternative reduces exposure to potentially infectious waste and can reduce ongoing disease transmission

**Hygiene promotion** – Hygiene messages educate affected populations on disease risks and transmission routes. Often, in emergencies, hygiene promotion is condensed into key messages, such as the need to wash hands at critical times. Promotion can be at schools, in large community groups or at the household level.

**Distribution of soap and/or hygiene kits** – hygiene kits equip affected populations to act on hygiene promotion. Hygiene kit distributions often provide populations with HWT products, soap, buckets, feminine hygiene materials, toothbrushes and other materials, depending on the context.

**Environmental hygiene** – environmental hygiene efforts aim to protect populations from existing or new risks by reducing environmental pathways of disease transmission. Environmental hygiene interventions can include collecting rubbish, disinfecting household objects or even improving land drainage. Household spraying is an environmental hygiene intervention where a disinfectant (mostly chlorine) is sprayed on household surfaces by trained responders to prevent inter-familial transmission of disease.

#### **Expected results**

- Students and faculties understand the concept of WASH, its problems, issues, challenges in pre, during and after any emergencies.
- Students and faculties developed better understanding on the causes and consequences of various communicable, non communicable diseases.
- Water and sanitation are critical determinants for survival in the initial stages of a disaster. People affected by disasters are generally much more susceptible to illness and death from

disease, which to a large extent are related to inadequate sanitation, inadequate water supplies and inability to maintain good hygiene.

- Students understand the various adequate intervention safe drinking water, better sanitation and better hygiene practices.
- Students get prepared themselves so as to respond to such hazards in future.

#### Budget

Sl. No	Particulars	Amount
1	Mementos and certificates for the students and guest speakers	10000
2	Snacks and refreshment for all the students and guests	8000
3	Transportation for the students and guest speakers	6000
4	Flex, stationeries like files, pens, notepads, Xerox materials etc	3000
5	Breakfast, lunch and dinner for the guest and students representatives from BBSR	3000
6	Contingency	2000
	Total	32000

#### Possible Income

Students' contribution	Rs.7000
Contribution from CUTM	Rs.25000

**One day Seminar on WASH in Emergency Situation**  
**Date – 30<sup>th</sup> January - 2019**  
**Organized by: School of Disaster Management & School of Management, CUTM,**  
**Venue - Seminar hall, JITM, PKD**

**Agenda**

<b>Time</b>	<b>Sessions</b>	<b>Speakers/ Facilitators</b>
9.30 am – 10 am	Registration of participants and Delegates	
	<b>Inaugural Session (A)</b>	
10 - 11.00 am	Welcome address	Jaya Krishna, faculty , DM
	Presentation of Bouquets to the guests	Students
	Lightening of the lamp by the guest	A bhajan to be sung by a student
	Key note address, Director, SDM	A. Suchitra
	Key note address by Registrar, CUTM	Dr. Anita Patra, CUTM
	<b>Technical session - (B)</b>	
<b>11 – 11.20</b>	<b>Break (tea)</b>	
	Welcome to Chair cum Key note speaker	Students representative
11. 30 – 11. 50 pm	Key note address from the chair	Guest Speaker - 1 WASH and its importance to save human lives
<b>Students Presentations</b>		
11.50–12.05 pm	The condition of Water, Sanitation and Hygiene in the post Titili cyclone affected areas under Gajapati district	
12.05 – 12.20 pm	Role of engineering for Disaster Management	
12.20 – 12.35 pm	Unplanned Urbanization leads to various manmade and natural hazard	
12.35– 12.50 pm	Rain water harvesting to save lives	
12.50 – 1.05 pm	Resilient structures for Disaster Risk Reduction	
<b>1.10 – 2.00 pm</b>	<b>Lunch Break</b>	
	<b>Technical session - (C)</b>	
	Welcome to Chair cum Key note speaker	Guest Speaker - 2 Resilient structure a better preparedness measures to hazards like flood, cyclone and earthquake
<b>2. 2.10</b>	Key note address from the chair	
02.10–02.20 pm	Disaster vs Development	
02.20 – 02.30 pm	Global warming and its preparedness measures	
02.30 – 02.40 pm	Effect and impact of Disasters due to contaminated water, poor sanitation and unhygienic condition.	
02.40 – 02.50 pm	Institutional Fire Safety and its preparedness measures	
02.50 – 03.00 pm	WASH intervention and its process for better preparedness	
3.15 – 3.25 pm	Resilient cropping pattern in view of climate	

	change	
3.25 – 3.40	Break (tea)	
03.40 – 04.00pm	Guest Speaker - 3 Global warming and Climate Change: a threat to lives & livelihood	
04.00 – 4.30 pm	Question Answer session	
04.30. – 05.00 pm	Vote of thanks, Certificate distribution etc	Students

***Jaya Krishna Behera***  
***Assistant Professor – DM***  
***Centurion University***  
***Bhubaneswar***