FINAL EXAM ANSWERS

WASH COURSE DIPLOMA

STRATEGIA NETHERLANDS

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DATE: 10/02/2019

1. **What is Sanitation and Hygiene?**
2. *Sanitation*: Sanitation refers to the provision of facilities and services for the safe management of human excreta from the toilet to containment and storage and treatment onsite or conveyance, treatment and eventual safe end use or disposal. More broadly sanitation also included the safe management of solid waste and animal waste. Inadequate sanitation is a major cause of infectious diseases such as cholera, typhoid and dysentery world-wide (WHO, n.d.)
3. *Hygiene:* the practice of keeping oneself and one’s surrounding clean, especially in order to prevent illness or the spread of disease. So, hygiene is the behaviors and practices that are used to break the chain of infection transmission in the home as well as in the community (Roose, 2010).
4. **Why are water, sanitation, and hygiene important?**

Water, sanitation and hygiene (WASH) are crucial but often underplayed parts of the prevention and control of a number of neglected tropical diseases (NTDs).Access to safe water and adequate sanitation, together with good hygiene practices, can reduce the transmission of some NTDs, for example trachoma and intestinal worms. Trachoma is transmitted by flies, fomites (e.g. skin, hair, clothing, or bedding) and direct contact. Preventing transmission of trachoma can be achieved through access to clean water, appropriate hygiene practices that promote face washing, and access to proper sanitation for the disposal of human waste. Intestinal worms, which affect nearly 900 million people worldwide, is most prevalent in communities where people have inadequate access to toilets and/or hand washing facilities. Worms are transmitted through faecal-oral contact or enter through the skin of the feet in areas of open defecation. Access to safe water and adequate sanitation will help communities affected by both trachoma and soil-transmitted helminthes (STH) to escape from the perpetual cycle of infection and reinfection (Community Eye Health, 2013) .

1. **What is open defecation?**

Open defecation refers to the practice whereby people go out in fields, bushes, forests, open bodies of water, or other open spaces rather than using the toilet to defecate (Unicef, n.d).

1. **What is Sanitation Marketing?**

Sanitation marketing is a relatively new approach to promoting sanitation and is often carried out by non-government actors such as NGOs, or faith-based organizations, it is based on the principles of commercial marketing, requiring skills that do not often exist within the water and sanitation sections of a municipality, NGO, or development agency. For sanitation marketing to be effective therefore requires input from a range of implementers, which may include government (Municipalities, Utilities, or local government agencies); sanitation consultants with knowledge about marketing social goods; research companies; communications and marketing companies; NGOs to support training of masons, masons and pit emptying providers (Sansom, 2013).

1. **What are some of the biggest challenges you face in teaching hygiene and sanitation?**

Some of the biggest challenges I face in teaching hygiene and sanitation include:

1. Cultural barriers; like reaching the women to invite the education;
2. Talking about some sanitation relevant practices; like excreta and its disposal is also among the teaching barrier in some cultures; like Somalia/Somaliland; and
3. Visiting the defecation area and households for hygiene promotion is also challenge for teaching.

**6) What is sustainable sanitation?**

The sustainable sanitation system and its objective is to protect and promote human health by providing a clean environment and breaking the cycle of disease. To qualify as sustainable sanitation, a sanitation system has to be economically viable, socially acceptable, technically and institutionally appropriate, and protect the environment and natural resources.

Most sanitation systems have been designed with these aspects in mind, but they fail far too often because some of the criteria are not met. In fact, there is probably no system which is absolutely sustainable. The concept of sustainability is more of a direction than a state to reach. Nevertheless, it is crucial that sanitation systems are evaluated carefully with regard to all dimensions of sustainability.

Since appropriateness to the context is such a core criterion for sustainable sanitation, there is no one-size-fits-all sanitation solution. However, taking into consideration the entire range of sustainability dimensions, it is important to observe some basic principles when planning and implementing a sanitation system.

The following sustainability dimensions (or "criteria") should all be considered in the design or upgrade of a sanitation system.

**Health and hygiene**

Includes the risk of exposure to pathogens and hazardous substances that could affect public health at all points of the sanitation system, from the toilet via the collection and treatment system, to the point of reuse or disposal and downstream populations.

This dimension also includes hygiene aspects as well as possible impacts on nutrition and health resulting from the application of a certain sanitation system.

**Environment and natural resources**

Includes issues such as the water, energy and other natural resources required for construction, operation and maintenance of the system, as well as the potential emissions to the environment resulting from use. Also includes aspects of safe recycling and reuse of excreta (and any associated effects, for example reusing wastewater, returning nutrients and organic material to agriculture).

Furthermore, it includes effects on consumption of non-renewable resources (for example excreta-derived biogas replacing fossil fuel use).

**Technology and operation**

Incorporates the functionality of the system, and the extent to which the entire system – including collection, transport, treatment and reuse and/or final disposal – can be constructed, operated and monitored by the local community or the technical teams of the local utilities.

Furthermore, the robustness of the system, its vulnerability to power cuts, water shortages, floods, etc. are also included in this criterion. Finally, the flexibility and adaptability of its technical elements to the existing infrastructure, geology, and projected demographic and socio-economic developments should also be taken into account.

**Financial and economic issues**

This dimension includes the capacity of households and communities to finance the sanitation system, including the construction, operation, maintenance and necessary reinvestments in the system. In such calculations, direct benefits – for example income or savings from recycled products – and external costs and benefits have to be taken into account alongside such direct costs.

The external costs might include environmental pollution and health hazards. Benefits may include increased agricultural productivity and subsistence economy, employment creation, improved health and reduced environmental risks.

**Socio-cultural and institutional aspects**

The criteria in this category evaluate if the sanitation system is socio-culturally acceptable and appropriate for the users. Further considerations include the following aspects: Convenience, perceptions, gender issues, religious or cultural issues, impacts on human dignity, compliance with the legal framework, and stability of institutional settings.

**Principles for planning and implementing sustainable sanitation systems**

The following principles for planning and implementing sanitation systems were developed by a group of experts and were endorsed by the Water Supply and Sanitation Collaborative Council as the “Bellagio Principles for Sustainable Sanitation” during its 5th Global Forum in November 2000:

1. Human dignity, quality of life and environmental security at household level should be at the center of any sanitation approach.
2. In line with good governance principles, decision making should involve participation of all stakeholders, especially the consumers and providers of services.
3. Waste should be considered a resource, and its management should be holistic and form part of integrated water resources, nutrient flow and waste management processes.
4. The domain in which environmental sanitation problems are resolved should be kept to the minimum practicable size (household, neighborhood, community, town, district, catchments, and city) (SUSANA, n.d.)

**7) What are the steps for planning and implementing a successful WASH behavior change campaign?**

The steps for planning and implementing and successful WASH behavior change campaign are seven, which are:

1. Select the target behaviors (What are these behaviors);
2. Define the priority and influencing groups;
3. Understand the barriers and motivators;
4. Define what your activities need to achieve;
5. Make the change happen;
6. Measure change in behaviors; and
7. Document and share the result (Schmied, 2017 )

**8) What are the challenges faced by WASH Projects in Africa:**

The challenges faced by WASH projects in Africa include:

1. In adequate regulatory framework;
2. Lack of clarity of institutional roles and responsibilities;
3. Problematic financial system; and
4. Social, cultural, economic and political factors also complicate the successful implementation of the WASH projects in Africa.

(https://www.washadvocates.org/sustainability/wac/, N.d)

**9) You have visited one of the schools in your locality. What part of its surroundings can you see that satisfy the criteria for disease prevention? List the parts of the building and its surroundings, and state why they are important.**

The parts of the school those I can see for assessment can include:

1. School Compound sanitation; it is important and it should be free from solid wastes and flowing liquid waste.
2. School latrines and their areas; it is important due to both their provision and their maintenance-cleanness as well since the latrines are the most important sanitation facilities.
3. Water supply-water points and Wash basins and hand washing facilities; since the latrines will be nonsense if water and hand washing facility are not available.
4. Solid Waste management method; (e.g. is there a refuse container in each class room, a burial pit or incinerator in the compound); it is important for prevention.
5. Personal hygiene for the students themselves; observe some of the students; such as finger nails, feet, hair, lice, etc.
6. Classroom; is it overcrowded or? Is it ventilated? And the like.

**10) You have asked the local county government to provide a license for your new hotel in town. The *inspector* asks you to assist him to describe the basic** hygiene for your business before licensing. Kindly describe.

For my hotel basic hygiene description:

1. Hotel Kitchen is clean and has cleaning routines
2. Has Rubbish disposal and recycling policy.
3. Has Cleaning routine in toilets, bathrooms and showers (plus examination of cleanliness of such rooms)
4. Cleanliness of bedrooms including bed linen, curtains and carpets
5. Has Laundering policies
6. Sanitary disposal methods
7. No Smell and good air quality is one of our values.
8. We Provide of items such as touch-free soap dispensers, hand driers and waste bins
9. Has hand washing facilities for guests; and
10. All hotel staff hold their updated health certificate.

**11) You have to make a plan of action for the promotion of WASH in your town. Briefly describe the activities that need to be included in your plan.**

Let me divide into two status; emergency status and development one:

A) In emergencies my plan of Promotion will include these activities:

1. Establishment of a team to deal a hygiene promotion and to provide information on environmental health.
2. Mobilization by focusing of: key health problems, physical resources needed and those available; like shelter, food, water, sanitation, etc.) , human resources available for hygiene promotion activities; such as health workers, teachers, religious leaders, non-governmental organizations, writers, artists, etc. and means of communication; like radio, newspapers, megaphones, printing and copying equipment, and national communication channels, such as singing and story-telling.
3. Form close liaison with the community.
4. Choose the subjects to be covered and type of preventive action to be taken (e.g. Promoting Hand washing, ensuring water safety).
5. Identify and select trainers
6. Develop clear health messages and choose the educational approach and methods to be used.
7. Develop field-test and use new educational materials or review existing materials (e.g. posters, leaflets, radio scripts, health talks) and adopt them as necessary.
8. Review activities and their immediate impact, and revise and adapt approaches to reflect changes in conditions and health status, if necessary (Online Resources Center, 2018).

B) Non-emergency status action plan may include:

1. Identify categories and number of public institutions.
2. Prepare survey tools.
3. Visit/inspect public institutions.
4. Provide a feedback report to visited institutions.
5. Discuss the findings with local authorities.
6. Hygiene education to students.
7. Discuss the main findings with the local government officials.
8. Check personal hygiene of students.
9. Discuss the hygiene status of religious institutions with the church and mosque leaders.
10. Call and address a general meeting in order to discuss the annual performance and get feedback from the stakeholders
11. Mobilize resources; and
12. Write reports

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