WATER, HYGIENE AND SANITATION POST GRADUATE DIPLOMA

WATER, HYGIENE AND SANITATION ASSIGNMENT 6

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1. Explain four examples of potential benefits and four examples of possible drawbacks from public–private partnerships in urban sanitation and waste management.

In study Session 13 on Commercial Opportunities in Urban Sanitation and Waste Management I have found that in 13.5 Public- Private Partnership in Sanitation Sector is that;

Good sanitation benefits the government, individual people and businesses so all three groups have an interest in promoting improved sanitation. The government can facilitate development of the sanitation market through a number of activities:

* developing promotional materials to help create a demand for the products and services
* providing subsidies to customers, where appropriate
* Working with the private sector to provide better financing to the customer – both by directly providing access to lower-cost funds and through policy changes that enable the private financial sector to offer more and lower-cost funds.

The government can also enter into direct public–private partnerships (PPPs). **PPPs were introduced in Study Session 9 in the context of solid waste management.** They can be defined as public services which are funded and operated through a partnership between national, regional or local government and one or more private sector companies. The private sector businesses are motivated to provide a good service by the potential profits they can make and the public sector offices are relieved of the responsibility to provide the service.

The Ethiopian government has highlighted the potential of PPPs as well as the willingness of entrepreneurs to develop sanitation businesses and fill the existing gaps in service delivery (for instance in schools). By working with the private sector, local government investment in sanitation marketing supports businesses to sell affordable, desirable products and services to low-income households which enable them to expand their businesses. Local government efforts also support scaling-up of sanitation services by encouraging greater household investment in improved sanitation and by working with local businesses to respond to increased demand.

Many economists say that the main advantage of involving the private sector is that it will be more efficient than the public sector in providing services at lower cost and with higher standards. This is because private sector organisations:

* can access capital (from loans or reserves) in order to purchase the most suitable equipment to manufacture sanitation products and they can buy raw materials in bulk, minimising their business expenditure
* often specialise in a small number of services and so have considerable expertise in these fields
* Are motivated by profit and have greater freedom to use their finances in ways that promote competition with other providers.

However, it is very important to be familiar with the drawbacks if the interactions with private companies are not managed well. Potential drawbacks include:

* seeking higher profits can lead to lower standards
* private companies can ‘walk away’ from a contract if it proves less profitable than they expected, leaving householders without the service
* the risk of a monopoly situation developing, so that there is no alternative to one particular service provider – who can then increase prices and/or reduce standards without fear of losing the contract
* Corruption (bribes paid to inspectors and officials to award contracts to a particular firm or to overlook shortcomings and associated penalties) can happen.

As I have seen in this study session, sanitation as a business goes beyond selling latrine slabs. It is crucial that private sector sanitation entrepreneurs develop business plans that will lead to viable businesses. Public–private partnerships must be very carefully designed, the roles of each partner clearly determined and spelled out, and the needs and expectations of each stakeholder addressed. This needs time and effort. Building partnerships is time-consuming and requires champions within participating organisations, but can result in improvements to people’s health and the environment while stimulating the local economy.

Benefits from public–private partnerships include:

* they can be more efficient and provide a better service because private companies are motivated by the potential profits
* private companies can be specialists in the service area and have access to expert knowledge and special equipment
* They may be able to access funds that are not available to government offices.

Drawbacks include:

* private companies may be greedy and more interested in profit than in providing a good service
* they may not be committed to providing the service over a long period of time and may leave or close down unexpectedly
* If a single company provides a service with no competition they may take advantage of their monopoly by raising prices.

1. Briefly describe the main activities needed for planning improvements in sanitation and waste management in local institutions.

**Sanitation and waste management in schools**

* **In Study Session 2, I learned about the effects of poor sanitation and waste** **management**. Below is the list of some of the potential impacts on schools.
* Health problems, impacts on attendance (especially for girls) and achievement, and pollution of the school environment.

Poor school sanitation and waste management create many problems:

* Many school children, teachers and school administration staff are exposed to increased health risks.
* The children’s ability to learn may be affected by helminthic infections which impair their physical and cognitive development. Diarrhoeal diseases and helminthic infections force many school children to be absent from school.
* Girls are likely to be affected by lack of adequate facilities for menstrual hygiene which can contribute to them missing days at school or even to drop out.
* If school latrines are not accessible to girls and boys with disabilities, they may not eat or drink all day to avoid needing the latrine.

**Conversely good sanitation and waste management in schools means that:**

* The children are more able to integrate hygiene promotion into their daily lives and can be effective messengers and agents for change in their families and the wider community.
* The proper behaviours that children learn at school are skills that they are likely to maintain as adults and pass on to their own children.
* You have been a school student at some time in the past. What were the components of school health services in your time?
* I might have various memories of events. My classroom teacher used to have checked on my personal hygiene. I have learned about the common bacterial eye infection trachoma and face-washing in science class. We were probably reminded to use the latrine properly and to wash our hands afterwards and before eating lunch and meals.

In South Sudan, many schools do not have water supply or latrines at all, or if they do, they may not have hand washing facilities. Even in schools that do have facilities, these are frequently not maintained or kept clean, or may be kept locked. To give guidance on how to improve this situation, a design manual has been published jointly by the Ministry of Health, Ministry of Education, Ministry of Physical Infrastructure especially Directorate of Water, Hygiene and Sanitation in collaboration with UNICEF and Water for Lakes State (WFL) water sector between **South Sudan and Netherlands Government (MoH, 2018-2019).** The manual gives recommendations for safe water supply in schools and the volume of water that should be available per person per day. It also establishes the principles for sanitation and hygiene provision in schools, which are outlined in the following below.

**To improve management of solid waste in schools the following steps should be followed:**

* waste bins in all classrooms and teachers rooms, with separate bins for recyclable and non-recyclable waste
* a regular cleaning schedule to keep classrooms and all other parts of the school including latrines and the outside areas, clean and tidy
* efforts made to discourage students or pupils from dropping litter anywhere in the school and to take pride in a clean school environment
* A disposal pit in the grounds that is fenced off, if the school has to dispose of its own waste. Waste deposited in the pit should be covered immediately with soil.

**Provision of improved latrines**

The provision of improved latrines with attached urinals in schools is extremely important. Many of the design requirements are similar to those for domestic latrines that **I have learned about in** **Study Session 5.** For example, latrines must be located a safe distance from water sources. **The government guidance for schools includes the following additional requirements**:

* There should be separate latrine blocks for boys and girls that are located away from each other in the school compound. They should be near enough to the classrooms to be convenient for use but not so close that odour is a problem. The location, design and construction must provide privacy and security. Hedges can be used as screens between girls’ and boys’ latrine blocks. Latrines for male and female teachers must be separated as well.
* Latrines must be easy to clean, well maintained and agreeable to use.
* The number of squat holes (cubicles) should be proportional to the number of students or pupils and take account of any future increase in school population. The recommended ratio is at least one cubicle per 100 students or pupils. All schools, regardless of size, should have a minimum of two cubicles for girls and two for boys. Using appropriately designed urinals for boys and men can reduce the total number of cubicles required.
* Facilities should be designed to be appropriate for the size of children in the school. For example, for young children door handles and wash basins need to be lower.
* Each latrine block should have one cubicle that is accessible to students with disabilities including those who use a wheelchair (Figure 12.1). This should have additional space inside, handrails, a raised seat and an access ramp.
* Hand washing facilities must be provided for boys and girls.

**Sanitation and waste management in health institutions**

Health institutions include public and private hospitals, health centres, health posts and special clinics. All these institutions have responsibilities to ensure the safety of patients and staff which means provision of sanitation facilities and proper management of healthcare waste. Similar to the guidelines for schools, a design and construction manual for water supply and sanitation facilities in health institutions has been published by the government (MoH, 2018). This provides full details of the recommended provision according to the type of institution and the number of people who visit or work there; it also includes recommendations for solid waste management.

## Prisons

Effective sanitation and waste management are also important in prisons, jails, and temporary arrest facilities. The transmission of communicable diseases such as diarrhoea, relapsing fever, scabies and typhus is made more likely by overcrowding and poor sanitation and hygiene. Access to safe water, showers, latrines and facilities for washing clothes are essential in a prison. There should also be appropriate solid waste disposal facilities. In addition, conditions in prisons can be improved by the following interventions:

* A sanitation committee can organise a regular cleaning schedule with the guidance of the prison authorities. Its duty is to plan and execute a cleaning and hygiene day at least once a week. Cleaning interior rooms and the prison compound, washing clothes and personal hygiene are among the priorities to maintain the health of detainees.
* Checking for the presence communicable diseases through regular prison inspection.
* An insanitary interior of the prison is attractive for insects such as cockroaches, ﬂeas, lice and bedbugs. New prisoners’ clothing and bodies must be inspected for the presence of these insects when they arrive. High standards of personal hygiene through frequent body washing, maintenance of clean premises and clean clothes should be enforced.
* The rooms for detention should have an adequate supply of indoor light and fresh air. The surface area of windows should be a minimum of 10% of the ﬂoor area in order to admit daylight and adequate air.
* Overcrowding must be controlled as much as possible because many people living in close proximity with each other in unhygienic conditions leads to the transmission of many communicable diseases.
* Periodical hygiene education on selected relevant topics.

**Religious institutions**

Churches and mosques areas are places where a lot of people gather. Both church servants and those attending need to have access to good environmental health services. The provision of a safe water supply and latrines with hand washing facilities in agreed sites should have priority. Proper solid waste management is also important.

**Public offices**

Various offices are organised to serve the population, such as city/town administration bureaus, municipalities, kebele administrative offices, etc. These all need a healthy office environment for the benefit of the health of the civil servants and their visitors. Particular requirements include well lit and ventilated offices/rooms, latrines and proper solid waste management facilities. The supply of safe water and hand washing facilities are important for personal hygiene.

Below are steps to be taken in order to make improvement programme in local institutions

The following step-by-step actions are important when developing a plan for an improvement programme:

1. Know the scope of activity by identifying the institutions to be included.
2. Assess the existing sanitation and waste management situation and identify the main problems.
3. Identify the possible partners that you can work with.
4. Identify and prioritise activities taking account of available resources.
5. Develop and implement the plan of action.
6. Composting is an example of waste recycling but it could also be described as an example of recovery from waste. Explain why this statement is true

In study Session 8 on solid Waste Reduction, Reuse and Recycling, I have found out that; Composting is an aerobic process, so the pile needs to be turned regularly to introduce air. This means dismantling it, mixing the waste to introduce air and then rebuilding the pile. The first turning-over of the heap should be done after two to three weeks and then every three weeks or so. The composting process will be complete within three to six months. The composting process generates heat, so it is normal to see steam coming out of the pile.

The process is complete once the pile is no longer heats up after mixing and rebuilding. The final product should be brown and crumbly and look like a good soil. If it still contains identifiable items, the process is not complete. Therefore Composting is an example of recycling because the waste is reformed into a new material, compost, which is different from the original waste. It is also an example of recovery because the compost has value as a soil improver and has been recovered from the waste.

4. Imagine there is a local NGO working in the town you are assigned to that wants to develop a school WASH programme. While preparing the project documents, the delegates of the local NGO come to your office and ask you to support them. Describe the minimum requirements that you will advise them to include in the sanitation and hygiene part of their programme.

**This question can be answered according to Study Session 12 on Institutional Sanitation and Waste management that I have passed across in my studies for Water, Hygiene and Sanitation** **Post Graduate Diploma this year 2019.**  Below are possible answers that I have mentioned or provided

My advice to the NGO needs to suggest the following:

* Separate latrines for boys and girls should be provided that are located in a convenient place in the school compound, give privacy to users, are easy to clean and agreeable to use.
* The number of latrines should be calculated based on the number of students or pupils (one cubicle per 100 students) with a minimum of two cubicles for girls and two for boys, with urinals as well.
* Latrines should be designed and constructed to be appropriate for children of the age at the school; small children will need facilities they can reach and feel comfortable using.
* There should be appropriate latrine and hand washing facilities for students with disabilities.
* Hand washing facilities with soap should be provided very close to the latrines with separate facilities for boys and girls. The supply of water for hand washing must be maintained at all times.
* There should be appropriate provision of menstrual hygiene management facilities that ensure privacy for girls and allow them to dispose of or wash used menstrual pads hygienically.

5. Giving examples, explain three examples of ways of encouraging or supporting an ISWM approach

The three examples given of the following possible ways of encouraging and supporting ISWM are as follows:

* the national government can allow greater flexibility in budget spending by municipalities
* extra funds may be allocated to adopt or extend ISWM
* start-up funding can be provided for new initiatives such as waste collection, composting and recycling schemes
* special awards could be given to individuals and organizations to celebrate successful projects
* providing effective training for people who wish to start new schemes and supporting them in the early stages of development
* Organizing promotional campaigns to raise awareness of the 3 Rs among all members of the community.

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