STUDENT: MOSES WAITHAKA NYOKABI

COURSE: WATER, SANITATION AND HYGIENE

ASSIGNMENT: MODULE 3 (Number 3)

DATE:30/12/2019

INSTITUTION: AFRICAN INSTITUTE OF PROJECT MANAGEMENT

ADMISSION NUMBER: AIPMS/287 / 2019

1. why is community based managed essential in management of water resource?

Community management is the ability of a community to control and influence development it’s own water and sanitation system.The reason why it is important in regards to water resource management is because:

1. The community assumes responsibility thus able to take ownership of the system this in turn allows sustainability of the system as they are responsible of every day running and management of it, this has in turn improved from helping the community to stop seeing themselves as clients but see themselves as co-owners.
2. A community managed water resource brings the community together as they are able to solve their problems together.ie when the whole community contributes to the repair or installation of a water system everyone comes together and also want to know if their contribution was put into good use.
3. A community managed water resource has also led to formation of development committees which have helped a lot in doing other functions ie how they can use the dispensed water for agricultural growth which in turns allows the community to grow economically.
4. Through the system the community is also able to improve their leadership structure as they are able to hold their leaders accountable ie a leader who embezzles funds meant for installing or repairing a water system is removed and a good one is elected .
5. A successful community managed water resource also acts as an entry point for other projects that are linked to sanitation and become beneficial to the community ie improving hygiene through hand washing.
6. A community managed water resource also acts as a source of empowerment to women and other groups that are over looked in the community as they are involved through the entire process of planning-implementation-management.
7. A community managed water resource has also acted as a source of knowledge and employment as caretakers are trained by the external agencies they end up being employed by the community to take care of the system and are able to do minor repairs.
8. A successful community managed water resource allows the community to be “woke” hence they are able to lobby the government and other external agencies in regards to service delivery for projects that improve the well being of the community ie construction of latrines.
9. A successful community managed water resource also improves the dignity of community members as there is pride that comes with managing your own stuff this makes them to strive being better everyday this creates community solidarity.
10. A successful community managed water resource also creates a good relationship and partnership between health workers and the community as health workers are able to monitor if there are any health problems that are water related.
11. A community managed water resource saves on operation and maintenance cost since the community is able to come up with a community routine maintenance program rather an external imposed one.

1. With examples, discuss the difference between Community management and Community

Participation.

1. In community management the community makes the final decision in regards to a project ie who will be the caretaker of a water system or which company will construct their borehole and they are responsible for the outcomes of their choices because they are involved all through from planning to implementation ie provision of names and a chip in finances where as in community participation the community does not make the final decision they are only consulted for suggestions.
2. In community management it aims at self reliance on how can we ensure the project sustainability through empowering the community to manage their own developments and systems independently hence becoming co-owners where as in community participation the community is more of clients/receivers what it aims at is the perception of the community in regards to the project being carried out.
3. In community management it aims at community control over what happens in their community in regards to development by the government and external agencies and which one is a priority I.e construction of a school ,health care facility but in community participation the community may just be a platform for data collection and the community have no control whatsoever in the projects on going or should be started in their area
4. In community management the whole community is involved in the decision making process hence community collaboration where as in community participation it is just a fraction of the people who are involved ie the senior leaders in the community who sometimes their opinion may not represent the desires of everyone in the community.
5. In community management we end up creating a thriving community since we make the decisions together to solve one problem ie lack of sufficient communal sanitation facilities and there is a sense of care for one another hence for every decision made and thing done a community member thinks of his neighbour but in community participation it sorts create an individualistic community since each person has his own opinion and the decision about a thing that should be done in the community is not unified.
6. In community management it is safe to say it allows people to connect with each other since it brings people together who share a common problem ie lack of water and wants to solve it together where as in community participation it is rather individualistic everyone wants to solve different problems in the society and thus we may not know whats a need or a priority at that time.
7. Community management aims at providing a platform for other development activities(entry point for projects) where as community participation only solves the one problem that the project is focusing on without factoring in mind future developments I.e improvement of a road to just ease mobility but in community management we may think of economic benefits that may arise from the road I.e building a market.

1. Give five maintenance problems and difficulties. How can you overcome maintenance

difficulties in the water supply system management?

1. Inadequate capacity building during project planning hence leading to lack of community management as the community ends up thinking it is the role of the government to manage the water system and they do not assume ownership and responsibility of the water system this can be solved with involving the community fully from the initial stages of the project planning to implementation through training and more so women who are the water carriers at the household and are able to advise on system design.
2. Improper choice of pumps has led maintenance problems as we have had water systems use pumps that have no spare parts locally thus when they break down it becomes a challenge to repair this can only be avoided by proper project planning which factors in choice of pumps that are easy to repair and locally manufactured if possible.
3. Lack of mechanics who can repair pumps in case of a break down,this has led to water systems becoming inefficient because of maintenance problems this again can be solved during project planning by choosing representatives from the community ‘caretakers’ to under go a training on maintenance and repair in regards to the pump at hand.
4. Lack of a proper incentive system for the local staff especially with the community managed water system this has led to the system caretakers being demotivated and their output decreasing hence they do not maintain the water system well this can be solved by coming up with a good wage structure and as well motivation tokens to increase out put.
5. Improper choice of level of service ie if a water system ie stand pipe is serving a bigger number of people it ends up breaking hence regular repairs which are costly due to crowding it would be better for each family to have a household water connection this increases the life span
6. What are Water technologies available in your area? Explain five.

Mostly the water technology has been influenced by choice of level of service and choice of water source currently in my area we have the following water technologies:

1. Ground water specifically from machine dug bore wells where water is pumped to a storage tank then later distributed to every house through household connections and also a main stand pipe to fetch from when the pressure isn’t enough to pump water.
2. Rain water is also collected catchment area I.e Ngethu dam where it is treated then pumped to a large reservoir then distributed to various areas and it charged by the county government.
3. Rain water on small house holds is collected via roofs then stored in a tank that has tap when the household members draw off water.
4. Hand drilled bore wells are also used in small households where they use a submersible pump to pump water to a storage tank then the water is made available to various draw off points via pipes.
5. Hand dug wells are also used in small households where they draw water using a rope and a bucket and store in medium tanks and containers.

5 . How do you ensure cost effectiveness in supply of water?

1. Involving the community during the water system design especially women who on the other hand advice to avoid costly errors in system design.
2. Involving the community during the water system construction by them contributing to the labour force which in turn saves on cost of implementation.
3. Involving the community during the project planning by asking them to cheap in in finances this on the other hand eases the cost during implementation.
4. Involving the community in managing the water system as they are able to come up with an affordable system management routine rather than an external imposed one.
5. Recruiting skilled man power from the community and country at large saves on project management which sometimes takes 25% of the total project cost as expatriates are really expensive.
6. Partnering with local industries which eases cost of project implementation as all materials used are not imported they are locally available.
7. Partnering with the government during project planning as the government can provide grants to minimize the cost of the project and as well give the project special import tariffs to subsidize cost of importing equipment and material.
8. Use of cost effective technology which uses available equipment and material which ensure longevity in water system operation and in case of a breakdown it is easier for repair as the technical expertise is available and affordable
9. Being very clear about the level of service we want to provide ie standpipes are affordable compared to household connection because of piping this allows us to choose the most affordable and convenient one that serves the people in need without stretching the projects budget.

**REFERENCE LIST**

1. <https://www.slideshare.net/collinschimuti/community-participation-49990976>
2. <https://www.researchgate.net/publication/265843194_Community_Participation_and_Water_Supply_Sustainability_Evidence_from_Handpump_Projects_in_Rural_Ghana>
3. [http://www.iosrjournals.org/iosr-jhss/papers/Vol.%2022%20Issue10/Version-10/F2210103138.pdf](http://www.iosrjournals.org/iosr-jhss/papers/Vol. 22 Issue10/Version-10/F2210103138.pdf)
4. Sphere Handbook

**NB I have tried submitting my assignments in APA format but I haven’t really gotten to understand regardless of how many times I have read it.**