Semana temática: Agua para la vida. Tribuna del agua.

Eje temático: Agua para la vida y salud publica

Título de la ponencia: *Water and health in Africa experiences from AMREF. (Agua y Salud en África experiencias de AMREF).*

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Resumen:

Globally 2.4 Billion and 1.1 Billion people do not have access to Sanitation and Water respectively. Africa has the lowest coverage only second to South East Asia. Sub Saharan Africa with a population of 770 million people has the lowest coverage at 58% for water and 36% for sanitation. 70% of the morbidity particularly for under fives is related to unsafe water and sanitation. Of particular interest is diarrhoea that kills some 700,000 children annually in the Sub Saharan Africa. Some of the factors contributing to this situation include climate variability including global warming, environmental degradation, deforestation and pollution of existing sources, increasing demand for water for varied use, low allocation of resources to conserve and protect sources, poverty and high cost of services, poor enforcement of appropriate laws and policies and ignorance among others. In an effort to increase access, AMREF, the largest African Health based NGO has tested and documented a model that ensures increased access to Water and Sanitation as well as ensuring sustainability of the interventions based on the beneficiaries own efforts. This has resulted in increased access to safe Water and Sanitation, significant reduction of related diseases, increased food production, afforestation, conservation of water sources, increased school attendance and performance for especially girl child and allowed some other income generating activities using the water.

AMREF has learnt and ensured that all interventions must be environmental friendly. Lessons Learnt in the process of interventions have been shared with other stakeholders for replication as well as used to influence new policies and practices.

There are still challenges that need to be overcome including that of lack of appropriate policies and legislations, poverty; effects of global warming and ensuring communities have the capacity to sustain the Water and Sanitation services across Africa.

Palabras clave: Water, Sanitation, Hygiene, access, Sustainability, Partnerships, Capacity Building, Influencing Policy and Practice, Environmental Impact, Poverty, Morbidity, Mortality.

INTRODUCTION

Water, Sanitation and Hygiene are strong Health and Livelihood determinants worldwide. Some 2.4 billion and 1.1 billion do not have access to safe Water and Sanitation respectively.

Africa has the lowest access/coverage with some 58% and 36% not having access to Water and Sanitation respectively. Given this situation, the United Nations has set up appropriate Millennium Development Goals (MDGs) to address this major global challenge. In this regard, MDG number seven seeks to address the issue by setting year 2015 by which half of the population should have access to Water and Sanitation and that by 2025, all should have full access to Water and Sanitation.

This paper will review the current Water and Sanitation status in Africa with a focus on the Sub Sahara Africa, which has the lowest coverage in the world. It will attempt to identify the reasons for the prevailing status and identify some of the remedial actions/efforts being done to alleviate the situation. Finally it will review some of the key challenges faced by the actors in the sector.

The experiences expressed in this paper come from one of the major actors, AMREF, which is based in Africa and has a mission to "**Better Health for the people of Africa"** through its mission, which is **committed to improving health and health care in Africa. AMREF aims at ensuring that every African can enjoy the right to good health by helping to create vibrant networks of informed communities that work with empowered health care providers in strong health systems.**

CURRENT STATUS OF WATER AND SANITATION IN SUB SAHARAN AFRICA

The Sub Saharan Africa has the lowest access to Water and Sanitation in the World, second to South East Asia. It has a population of 770 million and a growth rate of 2.3 percent. Overall, the average access to Water in terms of walking distances, quality and quantity is 58 percent. The access to Sanitation is rated at an average of 36 per cent which certainly is far behind water. Approximately 80 percent of the Sub Saharan population live in the rural areas whose access to Water and Sanitation is far much lower than the averages quoted above. This implies that the overall coverage is boosted by the good urban statistics where only about 20 percent live and therefore not a very good indicator of the actual situation. Water, Sanitation and Poor Hygiene related diseases contribute 70% of all cases particularly the under 5 seen at the Health Facilities. Infant diarrhoea is the third highest cause of mortality. Other causes include Malaria and Pneumonia, all of which are related to Water, Sanitation and Environment. Diarrhoea alone kills

700,000 children out of 4.4 Million born annually. Clearly all these trends point to the low access to Water, Sanitation and Hygiene.

SOME OF THE REASONS FOR THIS STATUS

a) Global Warming Phenomenon: This is one of the increasing threats to water catchment areas and conservation. Currently the deserts in Africa are spreading at an alarming rate and are one of the causes of reduced rainfall. This has contributed significantly to drying up of water sources.

b) High and increasing demand for wood fuel for cooking: Owing to lack of alternative appropriate fuel that is affordable, wood fuel becomes the only option particularly in the rural areas and has contributed to the depletion of forests.

c) Deforestation and unsafe farming practices: Cutting down trees for timber and wood fuel has exacerbated the situation. This is worsened by inappropriate farming practices such as uncontrolled irrigation that wastes water, soil degradation, siltation and eutrophication leading to drying up of water sources and water bodies.

d) Increased demand for Water: Industrialization, irrigation based farming and increase in population has put pressure on available water sources making it scarcer and scarcer.

e) Pollution: Due to weak or lack of enforcing appropriate legislations as well as weak and/ or lack of appropriate policies, pollutions of water bodies from sources such as industrial effluents, discriminate and /or unsafe disposal of solids and liquid wastes, mining etc, have continued to make the little available water unsafe for human and domestic animals consumption.

f) Uncontrolled rural to urban migration: As young work force moves from rural areas in search of better opportunities in the urban areas which are endowed with abundant resources, services and opportunities, they end up contributing to the urban informal settlements (slums) that are devoid of services such as Water and Sanitation. This contributes to increased demand for Water and Sanitation services as well as pollution of the existing water bodies from the in sanitary disposal of solid and liquid wastes which includes human wastes.

g) Poverty and affordability of services: Due to the rampant poverty where more than half live on less than a dollar a day, many of these people cannot afford to purchase water (even when it's available) at the high prevailing rates. Many Municipal Governments in the Sub Saharan Africa have tried to subsidize the costs but not enough to ensure the poor of the poorest get the required access. The emergence of "middle men" who purchase

safe treated water and hawk it to the most poor at exorbitant prices is a major growing threat to services accessibility.

h) Poor Governance: Unstable democratic governance which is increasingly under threat from dictatorial tendencies has to some extent taken away the "Voice of the poor" in that they may not be able to lobby for their inalienable democratic rights including access to resources and services.

i) Low capacity for operations and maintenance and general facilities management. It is clear that most Water and Sanitation facilities are often abandoned once they break down due to lack of "ownership" and good Management. This is largely due to the way most actors design projects ignoring sustainability issues.

j) Ignorance: Many people are not able to link most common preventable diseases that affect them to Water, Sanitation and Hygiene. Thus they fail to prioritize sanitation and hygiene issues which end up in polluting the precious water sources and contributing to escalation of preventable morbidity and mortality especially for under five as well as loss of productive time.

k) Resources allocation: Most Governments tend to allocate more resources to Water at the expense of Sanitation and Hygiene largely to due political expediency and seeking to want to do what is easily "visible" and "appreciated" by the community.

WHAT AMREF IS DOING

AMREF recognises the need for facilitating and supporting poor communities to access Water, Sanitation and Hygiene as a means to controlling and preventing the related diseases in order to improve health and livelihoods. Due to the value the communities attach to Water, this creates opportunities for community entry upon which other integrated health promoting interventions may be embedded. These include Sanitation and Hygiene, HIV/AIDS and Malaria prevention interventions, promoting maternal and child health among others.

AMREF employs the following key programme themes in all its interventions. These are Community partnering Community Capacity Building and Health Systems Research for influencing policies and or practices.

COMMUNITY PARTNERING:

AMREF mobilizes and facilitates the communities to identify priority issues to be addressed.

In most cases, Water almost always comes first on the priority list followed by other health promoting needs. In order to address the identified community needs, roles and responsibilities to be played by all stakeholders are identified and agreed on. In this regard, all players including the Government Ministries and or Departments are involved because at the end of the project, the communities will be left with the Government support to continue with the initiative.
All these are captured in mutual memorandum of understanding (MOU) and signed by all the parties before the start of the project.

COMMUNITY CAPACITY BUILDING

It is important that the beneficiary communities be trained to do their specific roles in order to be at the forefront of implementing the project but with technical support from AMREF and the Government. In this regard, capacity needs assessment will be conducted to identify the critical areas that need be addressed to ensure all the stakeholders have the knowledge and skills to implement the project. The next step will involve development of the necessary and appropriate capacity building tools, for example simple and appropriate pictorial procedures of constructing various types of Water and Sanitation facilities, how to do Operation and Maintenance of the facilities, how to sustainably manage the facilities in a transparent manner, methods of generating revenue from "user fees" for supporting Operation and Maintenance etc.
The next step will involve mobilizing and facilitating the communities to understand the need for cost sharing in order to create "ownership" and participate in running the facilities as their own.

HEALTH SYSTEMS RESEARCH FOR INFLUENCING POLICIES AND OR PRACTICE

In whatever AMREF does, it does so with the sole purpose of searching for knowledge, best methods and experiences that improve the cost effectiveness of doing things and attaining the highest impact. These results are shared with other actors for replication and influencing new policies and /or improving existing policies and practices.

This starts with identification of the existing gap or issue for which there is insufficient information or knowledge that need be developed, in order to reduce the cost of doing things, increase effectiveness and promote the impact of health outcomes. The next step involves developing an operational research protocol and systematically implementing it in order to document and share the findings with the stakeholders for replication, influencing policies and/ or practices.

AMREF ensures that whatever it is involved in does not negatively affect the environment. In this regard it has a policy of carrying out Environmental Impact Assessments and Audits strictly in line with Governments' National Environment Conservation laws and applying the findings to ensure whatever we do is in harmony with the Environment and or minimises the negative impact on the Environment.

Finally for each of the three themes, AMREF does monitoring and Evaluation to ensure our interventions remains at the cutting edge, relevant and effective.

SUSTAINABILITY OF WATER AND SANITATION INTERVENTIONS

Over the years AMREF has through Operations Research tried, several models of sustaining water, sanitation and Hygiene and has identified the following model which achieves sustainability, is effective and in tandem with most communities way of life and traditions. This model has now been replicated by other stakeholders and has informed the new Water policies particularly in Kenya and the other East African countries.

Step 1: Improving Community Ownership

This is necessary for sustaining the project as every one "owns" a piece of it. It starts with involving the communities in identifying through facilitation the most appropriate Water source or Sanitation facility to be developed. Groups or individuals then donate land to the community where the facility is to be constructed and that site is then registered by Government as "Public Land"

Step 2: The community is facilitated to draw bills of quantities (BOQs) detailing all the cost required against the necessary activities.

The community then organizes to cost share based on what is agreed as affordable based on each individual in come, mostly in kind.

Step 3: A Water and Sanitation Facility Management Committee, 13 in number and comprising of men and women id elected democratically.

Their role is to collect user fees and use it to manage the water facility including paying for operation and Maintenance and keep any surplus revenue in facility Bank Account from where it many be withdrawn whenever there is need.

Step 4: The Facility Management Committee will select at least two young persons to be trained by AMREF as Technicians on the construction (through hands on experiential learning), operation and maintenance of the facility.

Step 5: The trained technicians will then lead the rest of their communities in constructing the facility with technical support from AMREF and the Government Officers.

Step 6: The Facility Management Committee will collect "affordable" user fees from each of the consumers, bank the money and withdraw what is necessary for paying the technicians to operate and maintain the facility and other services such as security. The management committee is required to account for the use of revenue every 3 months.

Step 7: Over an average period of 5 years, the surplus revenue accumulated is adequate to support the construction of a new facility or support other priority developmental actions such as constructing or renovating a health facility, extending the water pipeline and storage facilities, farming using irrigation, heifer rearing, constructing schools and health activities etc.

SAMPLE RESULTS FROM FOUR WATER AND SANITATION PROJECTS IN KENYA, UGANDA, TANZANIA AND SOUTH AFRICA OVER FIVE YEARS

1. Increased Access to Water from 30% to 55% with average walking distance to water points reduced from 10 kilometres to 5 kilometres in Kenya; from 20% to 50% in Uganda (Gulu), 30% increase in East Cape, South Africa and from 50% to 70% in Tanzania (Mkuranga).
2. Access and use of sanitation and hygiene facilities increased from 20% to 49% in Kenya (Loitokitok) , 10% to 85% in Mkuranga Tanzania, from 20% to 70% in Kabale Uganda, from 10% to 60% in East Cape, South Africa.
3. Significant reduction in water and sanitation related diseases as follows:
    - Kenya (Kitui) from 75% to 42%
    - Uganda (Kabale) from 70% to 30%
    - Tanzania (Mkuranga) from 65% to 30%
    - South Africa (East Cape) from 66% to 36%
4. Increased school attendance, retention and performance (Particularly by girl child)
5. Women now involved in other economic activities such as making bricks using the availed water.

6. Reduced conflicts over water.
7. Increased afforestation (10%) and conservation of water sources.
8. New policies roll out (Water Policy 2002) using AMREF supported projects as models across East Africa.. AMREF is further participating in roll out.
9. New Environmental Sanitation Policy heavily borrowed lessons from AMREF and now being rolled out with our participation across the East African Countries..
10. New innovative practices learnt at AMREF, documented and shared across the East, Central and Southern Africa Countries. These include PHASE, various Capacity Building tools, Innovative Construction procedures, O&M and management tools of Water and Sanitation facilities.
11. A new innovative approach for Promoting Sanitation and Hygiene such as PHASE which was developed at AMREF has now been adopted for use by most African Countries.
12. Total compliance with NEMA laws i.e. Environmental Impact Assessment and Environmental Audits to ensure all water and sanitation interventions are in harmony with the Environment.

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