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The situation of women and children in Tanzania



INFANT AND CHILD MORTALITY RATES IN TANZANIA

The most dramatic signs of the serious problems affecting children and women in Tanzania are the high infant and child mortality rates.

Before articulating the role which the Water and Sanitation Sector has in this, it is a need to highlight the major issues at stake:

Total Population of Tanzania, 1985: 22 million
 Total Land Area : 945,000 sq km
 Average Annual Growth Rate : 3.2%
 No of children below 5 years : 4.4 million
 No of Births : 1.1 million
 Infant Mortality Rate (IMR) : 137 per 1,000
 No of Infant Deaths : 145,000 per year
 Young Child Mortality Rate : 94 per 1,000
 No of Young Child Deaths : 95,000 per year
 No of Improved Water Projects: 6,900
 Estimated Number of the Rural Population Served with Water : 8.4 million (38%)
 Estimated Number of Households with Latrines : 3.0 million (67%)

It should be noted that still births and early failures of pregnancy are not included in the IMR estimates, but occur in 50-100 per 1,000 pregnancies.

From population censuses in 1957, 1967 and 1978 estimates of infant and young child death rates are shown below:

Year	IMR (per 1000 live births)	Out of 1000 born No of children who die before 5th birthday
1957	190	--
1967	160	260
1978	137	231

Source: 1978 Population Census, Bureau of Statistics

Infant and child mortality rates have fallen. Nonetheless, the infant mortality rate of 137 per 1000 indicates clearly that there is a serious problem.

While the causes of deaths of children older than one month are most frequently related to the environment, the causes of high perinatal and neonatal mortality are primarily the result of the poor health and nutritional status of the mother. In order to design the most appropriate programme to reduce high infant and child mortality rates, it is therefore

very important to know the age-specific mortality rates.

WHY DO CHILDREN DIE IN TANZANIA?

The high infant mortality rate is the end result of a long range of processes in society that manifests itself in a high degree of malnutrition, high prevalence of disease and inadequate food intake. The processes in society that cause young child deaths have been explicitly systematized at:

immediate level
 underlying level
 basic level

About 50 per cent of all infant deaths occur during the first month of life.

This suggests that the poor condition of mothers is one of the MOST IMPORTANT IMMEDIATE CAUSES of young child deaths. The relatively high proportion of perinatal complications and mortality suggests that emphasis should be given to improving the conditions of women, especially during pregnancy: poor health and malnutrition of the mother, often linked with excessive workload during pregnancy, together with inadequate maternity care, antenatal and delivery care and children spaced too closely, result in high prenatal and early mortality rates. Maternal mortality is about 4 per 1000 deliveries, which could be reduced substantially with improved pre- and perinatal care.

It is estimated that 50-60,000 children die of dehydration from diarrhoea each year and another 50,000 or more die of immunisable diseases. Diarrhoeal diseases accounts for 7 per cent of children's deaths in hospitals. It is most common among children 18-24 months of age. About 15,000 children die each year of measles, and it is estimated that about 5-10 per cent of the under-five population has respiratory infections at any time. In most cases diseases and malnutrition interact, reinforcing each other's negative impact on the child. This increases the fatality rates of diseases very much. About 2.2 million children are moderately malnourished and about 330,000 children severely malnourished.

The underlying causes of diseases and dietary factors that are most strongly related to young child mortality are potentially many and

often interrelated. In a specific community, however, it is often possible to identify the most important ones and to understand their interrelationships. The underlying causes have been systematized in the three following groups:

- 1) Health - Basic services which
Water - serve to reduce the
Sanitation - incidence and fatality
of disease.
- 2) Household food - Necessary conditions
Security for securing individual nutritional
intakes.
- 3) Child care, - Services and activities that directly
Community improves the conditions of children
development, and women and that
Education indirectly increase
the utilization of
other services.

The underlying causes of young child deaths are themselves results of processes in society. These processes, or BASIC CAUSES, are determined and influenced by the material and social conditions of production together with political and ideological factors.

Survival of young people must be the most basic of all human needs. In that sense poverty can be defined as a situation where young children die. But poverty is seldom measured by mortality rates. Most often income per capita is used. By both criteria Tanzania is a poor country:

The fact that most food is still produced by rain-fed hoe agriculture has a direct effect on household food security, dietary intake, nutritional status and child survival.

The sexual division of labour is the most important aspect of the social conditions of production in Tanzania. Almost all communities in Tanzania are characterized by rather rigid sexual division of labour and a patriarchal organization, often within an extended family formation and with the man controlling the main resources.

Women are not only the prime producers of food, but they also have responsibilities for home-keeping and food preparation, child care, provision of water and firewood. The heavy workload of women and their lack of control over the main household resources including land, are the MAIN BASIC CAUSES of deaths of young children in Tanzania.

If women gain more control over resources, and if more of the resources controlled by men were diverted towards improving the condition of children and women, young child death rates would definitely go down in Tanzania.

The laws in Tanzania protect women to a large extent and enforce the 'EQUALITY OF ALL HUMAN BEINGS' against the traditional ideology contained in customary law. But in the interpretation and use of the law, the traditional ideology of legitimizing the sub-ordination of women persists. Some laws, notably those related to work protection and land inheritance still legitimize discrimination against women.

Child death rates in Tanzania are high, and they can be substantially reduced if people are aware of the important causes and actions which may be taken to prevent them. Parents are the most important actors:

fathers who can share more of the work of the household so that their wives may rest more, especially when they are pregnant

Mothers who need more time to care for their young children by feeding them more frequently, getting them immunized and giving them oral rehydration when they are suffering from diarrhoea.

The fact that these important actions are not being taken is partly because parents are unaware of the frequently fatal consequences of their lack of action.

DEVELOPMENT OF THE WATER AND SANITATION SECTOR

In 1971 the Government embarked on a very ambitious programme to provide all people in the rural areas with clean, potable and adequate water within a distance of 400 meters. This target was to be met by 1991. After half the plan period had elapsed, the situation could be summarized as follows:

- 1) 33 - 42 per cent of the rural population has access to improved water supplies compared to 10 per cent in 1970;
- 2) only half of the population who have access to improved water supplies are actually using them;
- 3) an increasingly large portion of new water schemes are not working because of inadequate maintenance, lack of spare parts and lack of fuel;
- 4) the construction of new schemes is probably keeping up only with population growth.

Improved sanitary practices have been encouraged by adult literacy campaigns and universal primary education. During the ten years between 1968 and 1977 households with a private pit-latrines increased from 23 percent to 56 percent of the rural population. However, it is now known to what extent these latrines are being used.

UTILIZATION OF IMPROVED WATER SUPPLIES

Concerning the quantity of water, the planning target for the rural water sector has changed from 45 to 25 litres/capita/day. Studies during the Water Master Plans the mean consumption (carried home) has been estimated to be presently 15 litres/capita/day. The consumption rate is an important parameter when designing piped water supplies. The total cost of a water system may differ as much as 40 percent depending on what is the per capita consumption rate. Distance to source of water also influences the amount of water used. A study carried out in Tanzania summarizes the conclusions about the factors influencing per capita water collection as follows:

- 1) higher income families generally use more water than low income families;
- 2) school education has a positive influence on water consumption;
- 3) large families use less water per capita;
- 4) families with many children use less water than families with few children;
- 5) families with a large number of females use most water;
- 6) families with longer walking distances use less water than families who live near water;
- 7) users of tap water use more water than users of traditional sources.

Households with easy access to water, i.e. less than 10 meters from the tap, on average collect 3 to 4 times as much water as the average for other households with a longer distances to the taps. Further, they consume 2-3 times as much water for personal hygiene per capita as households with more than 10 meters from a tap.

UTILIZATION OF IMPROVED LATRINES

If the utilization of improved water supplies is low, utilization of improved latrines is probably even lower. In the mid 1970's as a result of epidemic outbreaks of cholera, the government made it compulsory for every household to have a latrine. However, it is well known that in many areas the latrines were constructed but very rarely used. In a socio-economic study for three regions in Tanzania most people claimed that they use their latrines, but observations did not substantiate the claim. Similar observations have been made in two other regions. These studies revealed that:

- 1) less than half of the children below 2 years used the latrines;

2) almost 80 percent of the people used the bush while working in the fields;

3) at night the latrines were not used unless they are inside the house area.

CRITICAL ANALYSIS OF THE WATER AND SANITATION SECTOR

The political decision that every Tanzanian household has a right to easy access to clean drinking water is a logical interpretation and reflection of the socialist ideology expressed in the Arusha Declaration of 1967. The strategy launched in 1971 was based on these important assumptions:

- 1) development costs would be on average Tshs 220 per capita, irrespectively of the source of water;
- 2) piped water and diesel driven pump schemes would be the main technology;
- 3) the central government should have the primary responsibility for both the construction and the operation and maintenance of the projects implementation;
- 4) If water were to be available within 400 meters, this source of water would be used because of the higher quality of the water from this source compared to traditional sources.

The first two assumptions are interconnected. Development costs rose beyond Tshs 220 per capita, although they were brought down again when the more affordable shallow well technology was introduced. Only Tshs 1.4 million was allocated during the 1970's instead of an estimated Tshs 2.6 million. Taking inflation into account, allocations in real terms were much less than those which had been planned for.

Only 40 percent of improved water schemes have been found to function adequately. Lack of proper maintenance, diesel and spare parts are the main reasons for this. There is therefore a great need to rehabilitate all schemes not working at present. To rehabilitate schemes to supply the areas originally intended will require Tshs 500 million, (US\$ 30 million).

The funds required to construct new water schemes, rehabilitate old ones, maintain and operate all schemes for all of the people and their livestock by 1991 are estimated at Tshs 10.9 billion, (US\$ 700 million). This estimate assumes a 25 percent overhead cost. This is Tshs 2.9 billion in 1970 prices. Over the last 10 years Tshs 1.4 billion have been allocated to the water sector, or Tshs 0.8 billion in 1970 prices.

The conclusion from this analysis is that; even if the budgetary allocation for the water

sector increases dramatically the proposed technology mix is not affordable and the 1991 goal cannot be met. This implies also that the third assumption cannot hold. Even with a change of the technology mix, the central government cannot take the whole burden of financing improved water schemes. Although improved water supplies are often the highest priority of villagers, they expect the government to provide improved water. The role of villagers themselves in the development of rural supply schemes has been quite limited. They have contributed labour during construction. When completed, the schemes are operated and maintained by the government. Villagers have been passive receivers of new schemes. They have little or no responsibility for the schemes which they regard as government property.

When a water point runs dry, women revert to traditional sources rather than involving themselves in repairing the broken point. Even when water schemes do provide water, women may still prefer traditional sources. The official estimate of coverage of 38 percent of the rural population holds only if women perceive traditional sources to be clearly inferior to water from a new scheme. Unfortunately, views of women have been rarely considered in the design and implementation of new water projects. Problems of operations, maintenance and user acceptance of water projects have been known for many years, yet the role of villagers has remained largely unchanged for the last 15 years.

Improved water supplies are usually judged by improved quality, quantity, convenience and reliability. If a major impact of improved water supplies on child death rates is through reduced workloads for women, increased convenience is very important. Several studies in Tanzania have shown clearly that this is exactly the opinion of the women themselves. This leads to a most important policy conclusion, that; the almost complete lack of involvement of women in the development of strategies, planning, implementation and management of water projects must be changed.

The basic conclusion of all this must be that instead of replacing existing systems of water supplies, a systematic assessment and improvement of these systems should be made, together with the minimum necessary construction of new schemes. The most important implication of such a strategy is that women must be in the forefront of planning, implementation, maintaining and monitoring all improved water schemes.

A large proportion of Tanzanian households have a private latrine. There are, however, doubts about the extent to which these latrines are actually being used. An evaluation of the

Wanging'ombe rural sanitation project in 1982 suggested minimum characteristics of a satisfactory latrine as;

- 1) it must have a durable and structurally safe squatting floor
- 2) it must have an adequate provision for the control of smells and houseflies; for pit latrines this is best achieved through the installation of a screened vent on the pit of the latrine
- 3) it must provide adequate privacy for the user; this can be achieved through the provision of stable walls and a roof together with a door or a modesty wall
- 4) it must be affordable to the villagers.

The experience in Wanging'ombe shows that with the provision of materials valued at Tshs 200-300 per household (US\$ 18), villagers constructed improved latrines that would cost Tshs 2,000-3,000 (US\$ 180) if all the labour had been hired.

The fact that children under two years of age do not use the latrines poses a special problem. It is known that excreta of small children is especially dangerous for spreading diseases. New ideas are needed to solve this problem.

In summary, the experience so far suggests that health education, improved sanitation and water supplies must always be considered together in order to achieve an impact on child survival and development.

PRIORITIES IN WATER AND SANITATION SECTOR TO ACHIEVE THE OUTCOME OBJECTIVES

In all rural development projects aiming at reducing the rate of young child deaths improved water supplies should be considered as potentially effective interventions.

In Tanzania, reductions in child death rates as a result of improved water supplies may come about more through a reduction of the workload of women than a decrease in water-related diseases. However, this may not be the case in every community. Therefore, it is important that the causes of infant and child deaths are identified and analysed in a specific area, before the best intervention can be planned.

Information about existing user choices, possible improvements plus additional complementary water sources should form the basis for discussion with the villagers, especially women.

A new strategy will necessarily have to recognize and fully involve women in the planning, implementation and management of water

projects. If the full role of women is realised, water development will become more of a community development effort rather than a technical intervention. Such a strategy would have the following benefits;

- 1) it is more likely to be affordable, because it would be less likely to involve expensive technology
- 2) it would not divert too much from accepted traditional patterns; emphasizing the improvement of existing practices instead of their replacement is more likely to get popular support
- 3) it would make it easier to involve women in the planning and management of water projects; as the main actors in identifying existing sources and user choices women will obviously be the main collaborators.

The first step in the process would be to organize and mobilize the women in the community to make an inventory of the existing sources of water, user preference and patterns. Then the possibilities of improving existing water supplies should be explored. Improvement of existing sources of water could be of many types. Deepening and lining wells, installing aprons and hand-pumps, etc. The construction of shallow wells or gravity-schemes would provide complementary sources not substitutes.

The following priorities therefore should guide development in the water sector

- 1) community activities to improve local water supplies;
- 2) village participation in planning, implementation and management of improved water supply projects;
- 3) strengthening of planning, supervision and monitoring at all levels, from national to village level.

The first priority implies that the development of local supplies should be based on women's views about water improvements, that assistance should be given to increased village capacity to improve present sources. It may cover support for an inventory of existing sources, training assistance, education programmes, a hygiene campaign, assistance and provision of materials not readily available locally.

Support for improved water schemes may cover training assistance and educational programmes. However, the delivery system and implementation process need to be much more coordinated with villagers' willingness and ability to participate on one side and district and regional functional capacity on the other side.

The third priority means that the capacity to implement village or multi-village water projects has to be increased. At the national level, support may be provided for research for a water strategy, and for monitoring and evaluation. At regional and district levels, it may also cover administrative assistance and educational programmes, campaigns and support to cross-sectoral coordination. Co-operation with organizations working in the field should be encouraged. At village level local maintenance systems need to be developed and encouraged.

The choice of technology should consider the following order of priorities

- 1) improvement of traditional sources
- 2) wells with handpumps (shallow or medium deep wells)
- 3) gravity schemes
- 4) renewable energy driven pumped schemes, e.g. hydraulic rams, wind power and solar power
- 5) electric driven pumped schemes
- 6) diesel driven pumped schemes

Human excreta are the principal vehicle for the transmission and spread of a wide range of communicable diseases. Some of these diseases rank among the chief causes of sickness and death of children. Dehydration because of diarrhoea is one of the main causes of death among young children. Other diseases, such as hookworm infection and schistosomiasis, cause chronic debilitating conditions and make children more likely to die from acute infections.

Provision is being made to include health education and sanitation in major support programmes. Through research projects, studies and pilot projects basic knowledge about conditions and pre-requisites for local participation in health, sanitation and water supplies is being gained.

Research on water-use patterns, water storage and handling should be supported. Women would be the target group for and participate in this research. Information about hygienic practices, water handling and use should be included in the curriculum of primary schools. Women should be encouraged to participate in educational activities linking water and sanitation programmes. However, it is important that these activities are not considered as "women's projects". Men too must understand the causes and effects of poor hygiene and health in order to participate in reducing child death. The fact remains that most of the formal decisions in Tanzania, at village as well as at household level, are made by men.

The choice of interventions should consider the following order of priorities

- 1) one latrine for each household;
- 2) as a next step, gradual improvements of existing latrine types using locally available materials;
- 3) promotion of more permanent latrines should be done as and when economic conditions allow;
- 4) for demonstration purpose improved latrines that are likely to be affordable for most households should be built;
- 5) improved types of aprons, soakways and washing slabs at water points should be adopted.