

### 3.2 Some consequences from high disease burden in Sub-Saharan Africa

#### a) Mothers of Africa die more than Mothers in other parts of the world

1 in 16 women in Sub-Sahara Africa are at risk of dying from maternal death in comparison to 1 in 2,800 women in the developed regions of the world' The socio-economic circumstances predispose them to this. The table below shows comparison of risk of maternal death among regions of the world.

**Maternal mortality estimates by United Nations MDG regions, 2000**

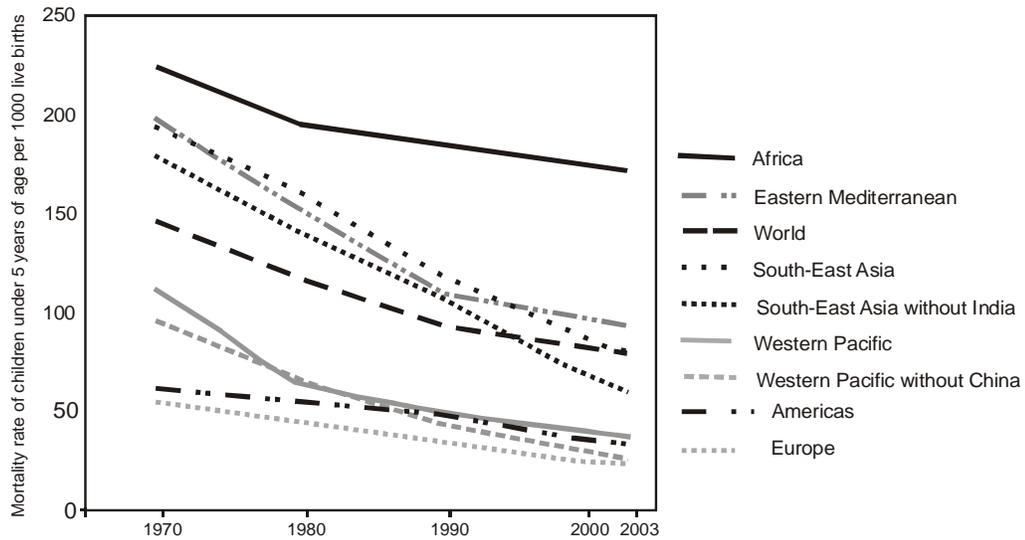
Region	Maternal mortality ratio (maternal deaths per 100,000 live births)	Number of maternal deaths	Lifetime risk of Maternal death, 1in :
<b>WORLD TOTAL</b>	400	529,000	74
<b>Developed Regions *</b>	20	2,500	2,800
<b>Europe</b>	24	1,700	2,400
<b>Developing Regions</b>	440	527,000	61
<b>Africa</b>	830	251,000	20
Northern Africa **	130	4,600	210
Sub-Saharan Africa	920	247,000	16
<b>Asia</b>	330	253,00	94
Eastern Asia	55	11,000	840
South-central Asia	520	207,000	46
South- eastern Asia	210	25,000	140
Western Asia	190	9,800	120
<b>Latin America and the Caribbean</b>	190	22,000	160
<b>Oceania</b>	240	530	83

(Maternal mortality in 2000: estimates developed by WHO, UNICEF and UNFPA, pg. 2)

**The death of a mother, especially in Africa, is a huge tragedy to the family and community. Children whose mothers die hardly survive. Even when they do, their performance in school and life tends to be compromised. Husbands also tend to get “derailed” when wives die. Therefore high maternal deaths are obstructing Africa’s development efforts.**

**b) Reduction in African Child Death is NOT keeping up with reduction in Child death of other Regions since 1980.**

**Slowing progress in child mortality: how Africa is faring worst**

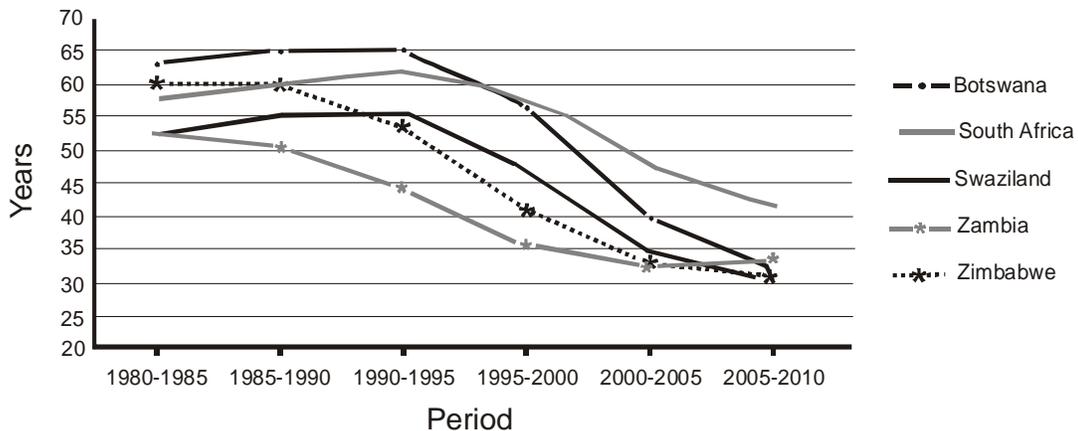


Source: The World Health Report 2005, Make every mother and child count, fig 1.1 pg 9

**Sub-Sahara Africa is only about 10% of the world population but provides over 30% of child deaths. High child deaths result in rejection of family planning which further compromises maternal well being.**

**c) Challenges from HIV/AIDS undermine Life Expectancy in Africa**

**Life expectancy at birth in selected most affected countries, 1980-1985 to 2005-2010**



Source: UN Population Division, World Population Prospect; the 2002 Revision

**It is ironic that while life expectancy in developed regions edges upwards towards 80years, in Africa it going downwards towards 30 years.**

## 4. APPROACHES TO SOLUTIONS

### 4.1 Bringing down Diseases linked to lack of Latrines and Sanitation

**In Africa, we do not talk so much about toilets but about latrines.** I refer to **latrines** rather than toilets because in most of Africa, what we have are latrines. Toilets need water to flush away human waste and in most of Africa, we do not have piped water to homes and facilities like schools. It's mostly latrines which have holes into which human waste is dropped.

Speaking in Fukushima on the title FROM PUBLIC TOILETS TO CLINICS is a great joy. It establishes a present day link and also a kind of HISTORICAL TELEPATHY between Fukushima and my original research work which highlighted the importance of latrines. I believe that the relationship between Africa and Fukushima in Japan will help us, in Africa, to put behind us the problem of high burden of disease from diseases promoted by lack of human waste management! Diseases that would be drastically reduced include:-

- Diseases from direct contamination of food in which flies play a major part and also from handling food with unwashed hands e.g. food poisoning.
- Diseases arising from parasite ova deposited directly into the soil when faeces are dropped on the ground. The ova contaminate plants that are eaten directly by people or eaten first by animals and then passed on through meat to people (e.g. round worms and tape worms). These worms may cause general malaise and even intestinal obstruction (e.g. round worms). Other types of ova hatch into active forms that penetrate the skin (e.g. hookworm, schistosomias) which then pass up to the digestive track and cause many illnesses including anemia.
- Serious diseases arise from contamination of water and may even lead to epidemics of cholera, dysentery and other diarrhoeal diseases that cause many deaths.

All the above contribute over 25% to disease burden within Africa. In present day Africa without widespread access to piped water, reduction of this disease burden is dependent on construction and use of latrines in the homestead as well as public latrines in places where people gather for long hours.

In the study of 1976-82 the project promoted a package of interventions that promote environmental sanitation and cleanliness. These included:-

- Dish racks - for drying household utensils in the sun after washing
- Latrines - for disposal of human waste
- Grass around the homestead cut short to keep away snakes e.t.c.
- Reduction of potholes that hold stagnant water to reduce insect breeding.
- Clean tap water sources to provide clean water for drinking and household use

**Changes in home environment during the project**

**Homestead Environment and Water-Related Activities**

<i>Action Area</i>	<i>Mean Percentage Positive*</i>		
	<i>October 1977</i>	<i>April 1979</i>	<i>January 1980</i>
Dishrack presence and use	1	96	88*
Latrine use	1	95	91*
Grass cut within 16m of house	15	90	85+
Home free from potholes and stagnant water	14	84	85+
Cleaned-up water source	12	77	81+

\* Due to variability in community sizes findings for each observation were expressed as percentage of households positive (having achieved target) in each community.

A most encouraging finding three years following the initiation of the study was the drop of intestinal worm infestation from 80% to 6% as shown in the table below. Along with this there was great reduction in all diarrhoeal diseases incidence.

**Table of reduction of worm infestation**

**Latrine use and Worm Infestation**

	<i>1977</i>	<i>1978**</i>	<i>1979</i>
Percent of households using latrines	1	96	91
Percent positive with* Intestinal worm ova	80	64	6
Sample Size	245	241	250

\*Children up to 12 years of age.

**It is very sad that today, MANY DECADES since we knew these facts, NOT all homes in Africa have homestead latrines. Furthermore, not all public facilities have well-functioning public latrines. Therefore, ensuring the presence of functioning latrines in every homestead and well kept public latrines is one of the most urgent public health actions to be undertaken.**

**Latrines for family use** are small units build outside the houses where we live. The small unit is built around a hole that is 30 to 40ft deep in the dimensions of 3ft by 4ft. Overlaid across the deep hole are planks of hard wood. Over this hard wood is overlaid wire mesh or similar substance over which either mud or cement with stones are places to make a floor. A small hole is left in the floor into which the human waste is dropped directly. And around this is a unit is built to provide privacy. When human waste is released from the body, it travels a long way to hit the bottom of the deep hole. So the latrine is sometimes called "The long drop".

In a family setting (homestead) there can be 1 Or 2 latrines or one latrine with 2 holes built back to back.

Picture or Sketch of homestead Latrines to show; not to describe

**Public Latrines** are what are needed in places where people gather for a long time e.g. Schools, places of worship and market places. The safety of these devices is important since each of them can have 4 to 6 holes; which means the larger hole in which these smaller holes are located is much longer and its construction more challenging. Therefore these public latrines must be such that their safety is and cleanliness that is assured to be safe and attractive for use.

Picture or Sketch of Public Latrines: to show; not to describe.

## **4.2 Beyond Latrines to Health Clinics**

### **a) Diseases of poverty unrelated to latrine use**

As can be seen in the classified of **Diseases of poverty** presented in 3 above, some of the diseases of poverty are outside those affected by the presence and use of latrine. Furthermore, there are other diseases of poverty routinely seen in Africa which are not included in the list presented in 3.1 above. In the context of the classification of **Diseases of Poverty being an important consideration in Africa**, a more comprehensive list would include some that are not in the list. Some of these conditions are:-

- Maternal death causes
- Perinatal death causes
- Morbidity and death from childhood diseases preventable by immunization
- Respiratory and other diseases of childhood,
- Malnutrition
- Diseases of the adult population including those afflicting men
- General malaise related to poor sanitation and hygiene
- Mental health & pregnancy related health problems
- Accidents and trauma

- chronic disease e.g. cancers, diabetes, hypertension and other cardiovascular conditions in children, adult men and women
- Evidence of people living in poor sanitary and hygienic conditions
- Accidents
- Mental illnesses
- Violence-related morbidity and death.
- AND the BIG one: HIV/AIDS.

It would take a long time to go over how each of these diseases affects communities and individuals living in poverty. But I believe that some reflection makes it clear that, indeed, when people live in poverty, these conditions are common. And since over 50% of the people of Africa live in absolute poverty (on less than one US \$ per day), these conditions are common on the continent. To help those who are not familiar with what I am saying, let me present to you some pictures of what this means.

Pictures of children and adults with some of the conditions mentioned above.

## **b) From Latrines and Community Health Services to Health Clinics**

Dr. James Nyikal of Kenya's Ministry of Public Health has eloquently stated "**Health is made in the home and community. Damaged health is repaired in health clinics, health centers and hospitals**". The AFRICA HEALTH STRATEGY adopted by Africa's Ministers of Health and approved by African Heads of State in 2007 recognizes the importance of the Community Level in Health care. It is at the community level that action on latrines is most effective. Community level health work is particularly important for:-

- **Health promotive** activities since this links into lifestyles, culture and traditional practices that are best handled and sensitively treated in a culturally proper context.
- **Disease Preventive** activities e.g. improvement of sanitation and hygiene that includes construction and use of homestead and public latrines and prophylaxis with anti-malarial medicines for young children and pregnant women.
- **First line curative services** such as oral rehydration for children with mild dehydration and treatment of malaria, treatment of simple opportunistic infections of People Living with AIDS (PLWAs).

To achieve good results, the Community Level must have:-

- Well-selected and trained Community Health workers/Agents
- Good back up by health workers from the first referral level who provide supervision and advice on referrals such as Health Extension workers
- Effective referral arrangements to health clinics, health centers and other health facilities like hospitals, Nursing homes etc.

**c) The important role of Health Clinics in reduction of the disease burden.**

Health clinics constitute the first level facility to which sick people are referred from the Community-Based Health Care services. Most people in Africa get to Health Clinics (sometimes called **dispensaries**) by walking. Therefore for them to make the maximum use of these facilities, they need to be within short distances of no more than 5km. Otherwise, people only go to them when they are desperately ill and usually die because the clinics are not equipped to deal with complications of this nature. Unfortunately, the health coverage of the population is still very poor in Africa which implies that clinics are not within walking distance of most people. This is one of the factors contributing to the high disease burden. When they are available, health clinics should be staffed and equipped to provide basic services that include:-

(A picture to illustrate each point a, b etc)

- i. **Handling referrals from Community level services.** For example, a Community Health worker (CHW) may train mothers to manage **mild dehydration** through administration of oral rehydration therapy (**ORT**). Where needed e.g. with a restless or wailing child, the CHW may directly assist mothers with ORT. But when the dehydration become moderate to severe, ORT may no longer be possible as the child may not be able to drink fluids. A child who is **moderately to severely dehydrated** needs intravenous administration of fluids. Therefore such a child must be referred to a health clinic. Also to be referred to the Health Clinic are children who may not be responding to community level management of respiratory tract infection. Supervision by Clinic staff of the Community level health workers within which referrals are streamlined is important.
- ii. **Providing immunization** especially to children less than 5 years of age. This is particularly so because immunizations schedules are very precise regarding timing of the first dose and any subsequent doses. Therefore, most countries do not allow this to be done at the Community level because the educational level and the training of Community Health Workers is too basic to be given this responsibility. Health Clinics also all other immunizations except those for international travel. These include immunization of pregnant mothers (to prevent tetanus) and the general public to stop epidemics of meningitis and the like.
- iii. **Provision of Family Planning Services:** Increasingly, many African mothers would like to plan their families. For this, the first dose needs to be given after Medial Examination by a Health Professional at the level of the clinic at which the decision of the Family planning method to be used is made and the first dose provided. Later doses may be given in the context of Community-Based Distribution (CBD). Combination of this clinic service for the first time followed by CBD has proved very successful in increasing access to contraceptive services.
- iv. **Antenatal care Assessment of onset of labour**  
Health clinics should provide antenatal care to monitor maintenance of good health through out the pregnancy and to screen for high risk pregnancies. At the clinic level, an expectant mother could find out the Expected Delivery Date (EDD) and may even come to be assessed for onset of labour. Some clinics may have staff and equipment to carry out straight forward deliveries.

## v. **Providing curative Care Services**

Being close to people, the Health Clinic has a major role in providing curative services for most diseases but especially for acute illness that kill in a short time such as malaria, pneumonia, diarrhoeal diseases and management of opportunistic infection among People Living with HIV/AIDS. These health facilities also play an important role in ensuring compliance for long term treatment regimes such as those required for diabetes, hypertension, tuberculosis and ARVs.

The effectiveness of services at the clinic level depends on:-

- i. Adequate numbers of well trained health workers and proper equipment and supplies.
- ii. Streamlined referral to the next level facility

The Ministry of Health in Kenya is working on establishing a central facility with satellite facilities that refer cases to it. This would mean that:-

- a) To one clinic would be attached about 25 Community Health Workers whom designated staff members at the clinic would supervise. Community health workers would refer what they can't handle to the clinic.
- b) A number of clinics would become the satellite to one health centre or sub-district hospital. These clinics would send patients needing further medical attention to these health centers or first level hospitals. In turn these health centers or first level hospitals could refer patients to the 2<sup>nd</sup> and 3<sup>rd</sup> level hospitals.

The attractiveness of this approach is that it would be possible to cover an entire administrative unit e.g. (A district of a province) with a network of services beginning with the community level to the health clinic/health centre level up to the hospital levels. The whole country can thus be covered with health services. What would have the greatest impact on the reduction of the disease burden are the levels of the community and health clinic. At the same time, the level of the hospitals would contribute most significantly to quality of care of more complicated cases as well as increasing survival rates from chronic conditions e.g diabetes such cases.

All African countries are preparing plans similar to those of Kenya. The challenge is to get them implemented.

## **5. OBSTACLES TO IMPLEMENTATIONS THAT NEED BE OVERCOME.**

### **5.1 Coming to terms with a difficult history and facing up to the consequences of that history and present day constraint**

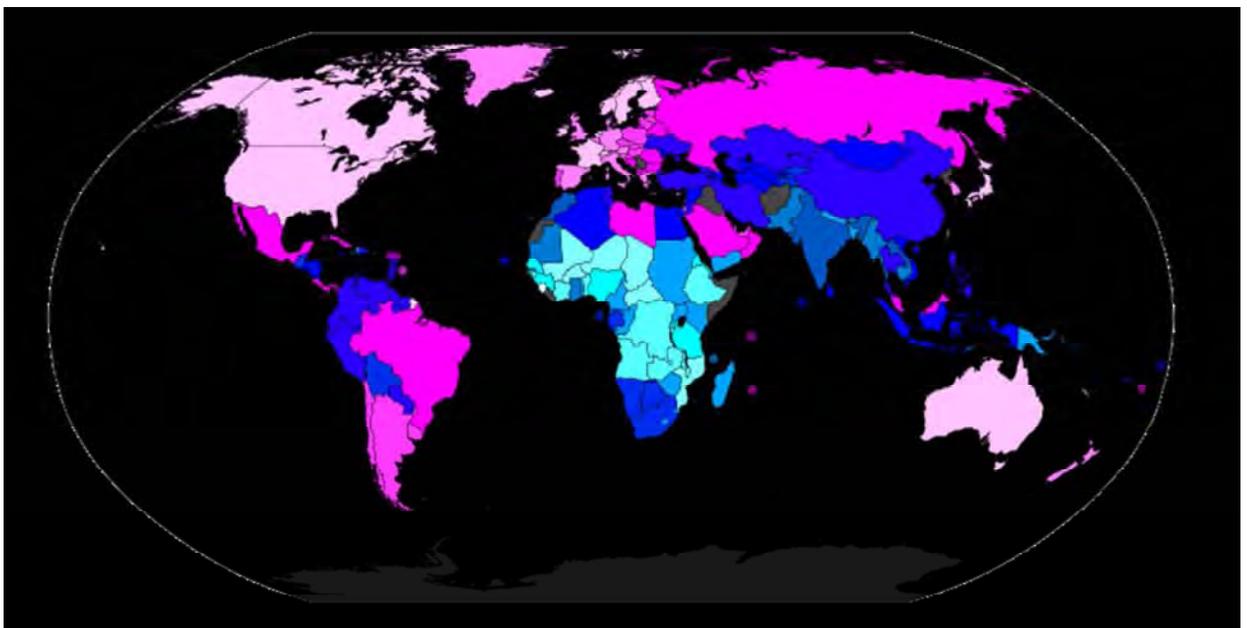
Africa was under a brutal Trans -Atlantic slave trade for over 500 years (early 1400s to late 1800s). This period of 500 years of brutal and massive slave trade was followed by 100 years of colonialism and apartheid (1884 - 1994). Furthermore, African countries begun to attain political independence from the late 1950s during the period of the cold war between socialism/communism and capitalism. As this cold war played out in Africa, each side established dictatorships to keep countries in their camps. This resulted in further entrenched oppression, instability and mismanagement of Africa's resources. The resulting **social inheritance of disempowerment** affects Africa to this day. Furthermore, because of the unfortunate consequences of this history, Africa continues to be deprived to the present day.

Therefore, one of the challenges for Africa is that of becoming a partner with other areas of the World. As it works on this, Africa appreciates positive relationships. We note with appreciation that Japan took the lead of establishing consultation between African Heads of State and Japan. It helps us when Africa is looked upon with compassion and positivity. It was so encouraging to see the TICAD IV brochure with the title **VIBRANT CONTINENT** and a lovely African child on it. It was so different from the lead article of a well known international magazine, which a few years ago, declared Africa as “THE HOPELESS CONTINENT”. There is no doubt that Africa must get out of social upheavals and instability into which history pushed us. We hope that we can do this with the help of Africa’s genuine friends.

## 5.2 Constraints from wide spread poverty.

Extreme Poverty is Africa’s greatest Challenge. This is particularly because with poverty comes oppressive, depressive, lethargic and apathetic out looks on life. This makes it difficult for most people to be pro-active and creative in finding solutions. We believe that with time these destructive consequences will become less as we recognise their existence.

The figure below depicts three levels of the Human Development Index arranged in a colour scheme. The majority of African countries fall in the low income index group indicative of high levels of poverty.



Countries fall into three broad categories based on their HDI: **high**, **medium**, and **low** human development. The 2007/2008 edition of the *Human Development Report* was published on November 27, 2007; in [Brasília, Brazil](#). [1]

### High

0.950 and over  
0.900–0.949  
0.850–0.899  
0.800–0.849

### Medium

0.750–0.799  
0.700–0.749  
0.650–0.699  
0.600–0.649  
0.550–0.599  
0.500–0.549

### Low

0.450–0.499  
0.400–0.449  
0.350–0.399  
under 0.350  
not available

Source: [United Nations Development Program's Human Development Report 2007/2008](#), compiled on the basis of [2005](#) data and published on [November 27, 2007](#).

## 6. INVITATION TO FUKUSHIMA TO PARTNER WITH US.

I salute Fukushima for being the kind of place from among whom someone of the stature Dr. Noguchi could come from. He was determined and overcame disabilities. He created opportunities where there seemed to be none. And beyond Japan, he also served Asia, North & South America and Africa. He was truly a global citizen. He was a unique person from a unique people. We salute him and we salute you, people of Fukushima and pay tribute to the fact that your beloved son died in Africa. Furthermore, we appreciate that Japan took the lead in establishing consultation between African Heads of State and Japan. Our desire is that these ties get stronger and stronger to the benefit of both sides.

**Therefore, in ways that are possible for you, we invite you to visit our continent to work closely with us in promoting the well being of humanity.**

On the 29<sup>th</sup> of May, I spoke at the United Nations University in Tokyo. I made the point that the United Nations is very much needed today for the well being of all the people of the World. It is not by accident that we find the UN University was placed in Japan. It is also not by accident that the important Kyoto Protocol on environment comes from the Japan. We thank the Japan for her many important roles in the world.

However, we also take note **that every individual everywhere in the world has a role to play**. Therefore I end the speech with the opening lines of my favorite prayer.

**Lord,  
Make me an instrument of peace;**

**Where there is hatred,  
Let me sow love;**

**Where there injury,  
Let me sow pardon;**

**Where there is doubt,  
Let me sow faith;**

**Where there is despair;  
Let me sow hope;**

**Where there is darkness,  
Let me bring Light;**

**Where there is sadness,  
Let me sow Joy!**

**(Adopted from the prayer of St. Francis)**

I THANK YOU people of Fukushima for your interest in and contribution to the people of Africa.

**Mama Miriam.**