



# Waste and Sanitation

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Cover photo: A heap of electronic scraps in Lagos: [news.cnet.com/2300-1041\\_3-5911167.html](http://news.cnet.com/2300-1041_3-5911167.html) - Cache

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# Editorial

## Waste and Sanitation

Dearth of structured waste disposal mechanisms reflects a pervasive lethargy associated with poverty and the poor. Limited understanding blinds the citizenry and policymakers to the connection between waste, hygiene, the cost of healthcare, and general life expectancy. For many Africans, wastes are worthless products that time and money should not be spent tending to. Making arrangements for disposing of wastes, sorting and recycling them are considered extravagant gestures, if not entirely objectionable and in bad taste. These values colour the general responses and policies for waste management.

Governmental responses have mainly remained at the level of non-interference, which could be slightly desirable if active community groups, NGOs and private sector individuals took the place of government. But very few have attempted to fill this vacuum. Nigeria's monthly 'Environmental Sanitation' exercises have for over two decades been a lone initiative for awareness creation and action in the handling of domestic waste in the sub region. Recently, the passage of the National Environmental Standards and Regulations Enforcement Agency (NESREA) added to the lonely task of setting pace for waste management in the sub region.

But Nigeria, according to a recent United Nations Populations Fund estimate, is heading to become a projected 165million people in October 2011 with an equally daunting amount of human, industrial and electronic wastes; the country typifies how the nations will react in the near future. As disasters and catastrophes linked to poor waste management unleash themselves, policymakers in governmental and intergovernmental agencies will wake to their responsibilities. Donor agencies will look to strengthen the abilities of governments, CSOs and private companies to respond to mounting waste. The shocking waste dumping in Koko, Nigeria (1988) and Cote d'Ivoire (2006) attracted outrage that simply died down with any other more extreme political or social disturbance.

So, in four years' time, Goal 7 is one of the millennium development goals that most countries in West Africa will fail to meet. Most nationals defecate in the open and dump non-biodegradable wastes in the few available drainage facilities. Waste will continue to be dumped and incinerated near residences; rains will wash heavy metals into waters and foods will carry them up the food chain. Health will deteriorate and congenital deformities shall be on the rise.

Interventions by development partners have to see waste disposal and integrated waste management as greater priorities than present.

--Odoh Diego Okenyodo

# The Menace of Open Defecation and Disease in West Africa

One of the major contributors to the prevalence of diseases in West Africa stems from the lack of adequate and improved toilet facilities in both urban and rural areas which leads to the problem of defecating in the open.

According to a WaterAid report, the consequences of open defecation are many, it pollutes underground water sources, contaminates agricultural produce, diseases such as cholera, diarrhoea and bilharzias. According to a recent UNICEF report in Nigeria over 200,000 children under the age of die due to diarrhoea, while the numbers for cholera within the region are also high.

Recent surveys by organisations like WaterAid, UNICEF, Community led total sanitation (CLTS), have revealed intriguing figures with respect to the problem of open defecation. A recent UNICEF report says that 33million Nigerians still defecate in the open. According to UNICEF's country representative, Dr. Suomo Sakai, the unwholesome practise leads to the depositing of about 1.7 million tonnes of faeces into the environment annually. In Ghana, about 5 million of the total population of 24 million defecates in the open. These



statistics from 2 of West Africa most populous countries paints a general picture for the region with respect to this problem.

While lack of sufficient infrastructure is a contributory factor to the problem with the failure of governments to effectively address the lack of necessary infrastructure in rural and urban settlements. Behavioural attitudes across societies also play a major part in this menace. Concepts of hygiene, cleanliness, purity, and beliefs about sanitation and disease are deeply ingrained through religious and cultural beliefs. There are also many different traditional beliefs with respect to disease causation, including spiritual concepts. Even when people are able to associate excreta with the spread of disease, faeces of small children are often considered harmless even though it contaminates water supply and the food chain<sup>1</sup>. Excreting in polyethene bags

gutters and in backyards is a common feature in most urban centres across West Africa.

Recent interventions by organisations like UNICEF, CLTS are beginning to show positive signs with steady improvements in the use of toilet facilities, worldwide the practise is said to have dropped to 28% in 2008, in the urban centres though the rates have remained steady at 5% during the same period according to a WHO/UNICEF report, during same period 76% of the urban population has access to improved sanitation facilities compared to 45% in the rural areas<sup>2</sup>. The danger though is that increasing population within the especially the city centres from increased birth rates and the rural-urban drift are continuously posing a chall-

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## Waste: Between Development and Disasters



**A**lthough exact figures on the dumping of toxic waste in West Africa are difficult to find the sub region has always been a popular destination for dumping of toxic products and waste from the more developed countries, argues Professor Okechukwu Ibeanu. The professor of political science, who was appointed Special Rapporteur of the United Nations Human Rights Council on the adverse effects of illicit movement and dumping of toxic waste on human rights, blames weak institutions for the state of affairs. As the environmental standards in Europe continue to increase, many European

countries are looking for sites to dump obsolete and dangerous products.

West Africa's persistent political crises and the almost total collapse of institutions that regulate sanitation and environmental protection have collaborated in making the sub region a popular target and destination for waste. "It's almost like a marriage made in heaven," Prof Ibeanu quipped. "In understanding the magnitude of the problem," he added, "it is often assumed that it is just toxic wastes that are dumped, but in addition to toxic wastes, there are many dangerous products and this affects the whole of West Africa. Toxic waste is more

popular in the minds of people because it is categorised clearly as waste."

He contends that the 'Computer Village' in Lagos, Nigeria, is a base for many obsolete and very dangerous toxic products but because they are not categorised expressly as waste, the public and policymakers don't see the danger. Cell phones and computers are particularly dangerous, especially when they come to the end of their life; every computer bears at least 20 different toxic substances when broken down. "Toxic wastes are clearly wastes but there is a whole invisible area which is dangerous products and

waste, which are extremely toxic as well."

These include obsolete pesticides and drugs, for instance, many of which come into West Africa towards the end of their shelf lives and become extremely dangerous to dispose of by the time they get to West Africa and it is time to use them.

The implications for West Africa are manifold. First, Prof Ibeanu says it is devastating on human health, especially in the long term because the impacts of many of these toxic substances are not seen immediately. "For instance," he said, "one can suffer from mercury poisoning, over a

West Africa's persistent political crises and the almost total collapse of institutions that regulate sanitation and environmental protection have collaborated in making the region a popular target and destination for waste

long period of time without actually knowing it...and so such ailments are even more difficult to deal with, like people at the Computer Village in Lagos insisting that nothing is going wrong with their health." He said because pollution from these sources affect a large population, it also has very far reaching economic impact as well in terms of the labour force, cost of providing specialised health care, etc.

At another level, the political scientist contended

that importing obsolete products defeats local production capacity, owing to the ease and low price of acquiring second hand computers and electronics. This creates some marginal impact in West Africa that are not easily seen.

Many end-of-life electronic products contain things like mercury, cadmium, chromium, lead and in many cases incinerated wire to extract copper are persistent organic pollutants that are really more dangerous than the physical aspect, which is also bad. Incineration fasttracks their effects because dangerous gases go into the atmosphere and poison underground water for people to breathe in and drink.

The major West African countries affected include Cote d'Ivoire where toxic waste was dumped in 2006. At the time, Cote d'Ivoire was still very much in crisis with institutional weaknesses, corruption and collusion by highly placed people and powerful international forces. Though the discovery of toxic waste dump in Cote d'Ivoire made a lot of news, practically all countries in West Africa are affected by the massive and widespread dumping of obsolete pesticides and end-of-life products.

There are a number of ways that West African countries can do something, Prof Okechukwu Ibeanu proposes. One is that the solution has to be collective, starting with the Bamako Convention which tried to regulate waste in Africa but has never really taken off. "The Bamako Convention was one of the earliest international mechanisms for

control of waste, but the governments of the continent have not taken the problem seriously, so the Bamako Convention was almost stillborn, so to speak," Ibeanu discloses. "The Bamako Convention would be a good platform to begin his collective prevention."

He suggests that West African countries also need to accede to all the international instruments and mechanisms such as the Basel Convention and the Stockholm Convention which are also ways of getting international support to be able to deal with the situation. He advocates for education on waste prevention, and ready availability of information on waste. "Many of these dangerous products are not labelled in local languages; people don't even know whether they are poisonous: they don't understand the impact, so education would be key in prevention," he advises.

On the more direct solving of the problem, West African countries need to put in place more robust policies on customs, the movement of goods and persons across their boundaries, and lots of gaps and weaknesses in the capacity of customs in West African countries which makes it possible for wastes to come in. He advises on developing local capacity for recycling. He cautioned against the indiscriminate use and disposal of wastes from

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sachet water which is polarly called 'pure water' in Nigeria, describing it as "the next major environmental disaster for many West African countries, as it has spread from Nigeria to practically all the West African countries." He added further: "I strongly believe that a good part of the massive flooding we saw in Lagos, the blocked drainages, must have been caused by pure water sachets, the cellophane that is used to sell the water." These polythene bags are not biodegradable, are not

recycled, and easily contaminate the food chain.

Records of the levels of mercury in fish, which can store mercury for a very long time in its tissues are unavailable. Eating such fish could be extremely dangerous. Much needed policies should be made for stringent testing and packaging of food, clearly stating what is contained in the food. Unfortunately, West African governments don't seem to see the problem, and so the situation is a time bomb waiting to explode. Ibeanu surmises that the problem of toxic waste places West Africa between development and disasters. In his words: "People may misinterpret the

coming of used products as development but actually many countries in West Africa are practically playing with fire; in the near future it is going to be a disaster if nothing is done about it. Dumping of waste is an illegal trade and illegal export market. Western government could stiffen the policy and punishment but part of the problem is the stiffer the punishment the more it is driven underground; criminal gangs will take over."

**Interview and report by  
Oluchi Agbanyim**

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enge to the attainment of MDG's set figures as 2015 approaches. The 2010 MDGS points out the fact that at current levels of progress the world will miss out on achieving the target set for 2015. In light of the ever increasing population rates it means that rural areas and especially urban centres are more than ever facing threats of disease due to lack of access to basic sanitation facilities especially toilets.

Governments in West Africa would have to increase in double folds investments in the area of provision of sanitation facilities, new policies and enlightenment campaigns to tackle the cultural and religious beliefs that continue to be a setback in achieving better sanitation especially in urban centres

are more than ever of utmost significance.

The failure to do this would no doubt see a West Africa that is more disease ridden in the future and consequently even more unproductive socioeconomically. The onus is therefore on all stakeholders to take a new direction and make amends for a better environment as we approach 2015 and even beyond.

**-Terfa Hemen**

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# Toxic Industrial Waste



Industrial processes often produce huge volumes of waste, including toxic waste. Pollution from solid wastes is common in countries with major mining operations e.g. iron ore in Liberia and Mauritania, tin/columbite mining in Nigeria, gold mining in Ghana, and bauxite mining in Guinea. Most pollution in West Africa is industrial waste: chemicals used in agriculture, nuclear power, combustion engines. The pollution from gas flaring can lead to cancer and destruction of biotic life. Industrial/toxic waste cause health hazards to man, and destroys marine life.

In Liberia, for instance, iron ore mining operations created health catastrophes and led to deforestation, mass destruction of biological species and massive pollution of some freshwater rivers. In 2006, over 30,000 people in Cote d'Ivoire's capital city Abidjan were affected by toxic waste dumped in open air there by Trafigura Company. This was similar to 1988 episode in which some persons received money in exchange for toxic wastes being dumped in Koko, a seaport in Delta State, Nigeria, resulting in the killing many of its people. More than 20 years after the evacuation of the toxic dumps, some of those who participated in the evacuation died of tuberculosis.

Trade in toxic wastes is unlikely to be completely eradicated or kept out of West Africa. The controversial

European Economic Partnership Agreement which intends to encourage trade liberalization and opening of borders for importation must be looked into since this will make the already unregulated West African borders porous for importation of all kinds of goods, which include toxic waste. The generation of industrial and toxic waste is likely to remain on the increase in West Africa, especially with the combined onslaught of Asian and European countries establishing factory plants in the region.

Worried by serious environmental and public health challenges to the region, West African governments are likely to step up import substitution to reduce the impact of toxic goods. Poverty in the region has been the reason why the region accepts the dumping of refuse in exchange for money. As the economic interdependency between states become more apparent, ECOWAS is likely to come under increased pressure from civil society to use its powers to pursue the stoppage of importing toxic goods in the region. This might take the form of a New International Economic Order (NIEO) or another dimension of North-South dialogue. The

imperative that will face the region will be to industrialise and come up with viable economic policies that will trigger growth and development.

Most West African states have environmental safety laws, but most of these laws are ineffective. Nigeria, for instance, has Federal Environmental Protection Agency Act, National Environmental Protection Regulation (management of solid and hazardous wastes regulation), etc. Despite these laws, toxic waste is still a big issue and yet to be tackled. Emerging trends in large urban cities like Accra, Lagos and Abuja, where such laws are being applied are likely to be replicated in other areas. This will be the precursor of the development of feasible solid waste and environmental hazard regulation policies in the region.

**--Audu Liberty Oseni**

Reference

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# Sustainable Sanitation and Hygiene



**S**anitation is a crucial stepping stone to better health; it forms a basis for achievement of most if not all of the MDG targets. Aside achieving the MDGs, sanitation is also a key to economic development in that investments in sanitation protect investments made in other sectors, such as education and health, and bring measurable economic returns.

In many West Africa countries, the government, civil society organisations and private individuals have put in great efforts to achieve proper sanitation and hygiene condition in communities. In order to achieve sustainability of the MDGs, recycling waste (human and animal) in small or large quantities is vital. Recycling is a method of waste manage-

ment that is environmentally more desirable; it helps the economy by recovering and reusing valuable materials and reduces the amount of waste needed to be collected, transported and disposed of.

Recycling also extends the life of disposal facilities, which saves money to the environmental agency. Also, it reduces the shortcomings of other methods of waste disposal. For instance, it prevents groundwater contamination as it has been discovered that despite careful engineering landfills can leak liquids into the groundwater, the production of gases such as nitrogen oxides and sulphur oxides that cause acid rain and smog as well as trace elements of toxics such as mercury compounds emitted during open air burning. Pollution when transporting waste to

disposal areas which may be harmful to the environment and trucks used to move waste create diesel exhaust, which contains nearly 40 toxic substances will be avoided.

Biogas and composting are affordable recycling methods that can be adopted in West Africa. Biogas produces natural gas that can be used for cooking and generating power which will in turn reduce the amount wood been fell in the forest and generate power especially for rural communities. Composting could be used to produce fertilizer, small scale composting of domestic waste has been introduced in Ghana. Recycling should be encouraged since this approach is considered to be



the right measure in attaining sustainability in waste management.

There are government policies that promote environmental sustainability and hygiene but these are not being implemented. With plans to remove the fuel subsidy, there will be a rise in the cost of petroleum products and this is an opportunity for government to tap into the readily available resource of recycling which needs to be harnessed. If recycling is not embraced, West African countries will continue

struggling with achieving Goal 7, Goal 1 and some of the health targets.

--Ugherughe Uyoyoghene

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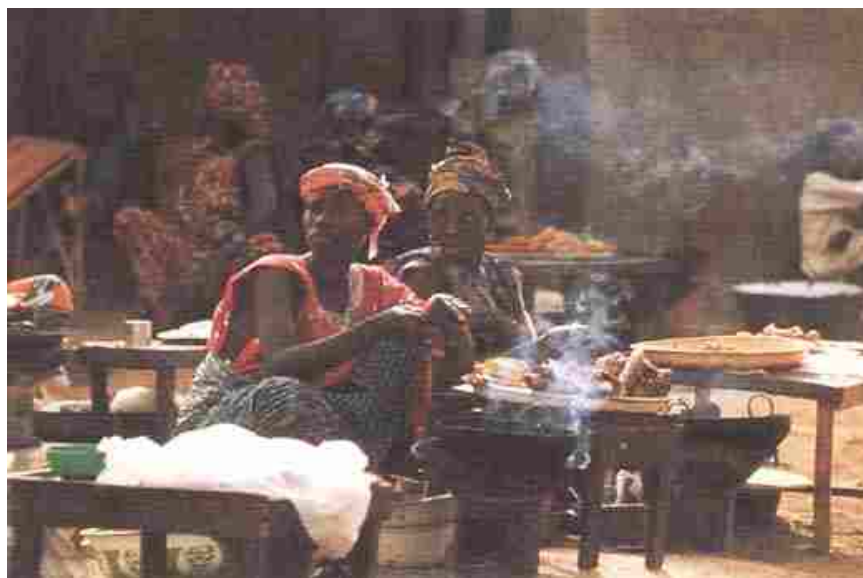
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## Food hygiene

A massive street food inspection carried out in Kerewan Gambia in 2009 noted that food safety and hygiene is becoming of increasing concern to both the government and development partners like the World Health Organisation. Across West Africa, this is symptomatic of an alarming trend of increased demand for food outside domestic environment in response to growing corporate culture and decline in food production.

Factors blamed for the decline in food hygiene in addition to the proliferation of food vendors and contamination from raw food, included lack of proper transportation, storage of prepared food, infected handlers, inadequate clean equipment and the abusing of time and tempera



-ture. Doubts over sources of water and food stuffs, as well as tableware are of primary concern, with the street food hawker likely to be living in slums with poor infrastructures, lacking clean toilets and drainages.

Perhaps the most neglected aspect is the post cultivation and

preservation processes. Research has uncovered, for instance, a high rate of aflatoxin, a toxin produced by mould before or after harvest due to low humidity during storage and can damage the liver or lead to liver cancer.

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Working with health inspectors, government and nongovernmental health agencies can ensure strict compliance to standard sanitation and hygienic procedures. Ghana has benefited from the UK-based Natural Resources Institute (NRI) which trained over 5000 vendors and food inspectors in improved food safety, hygiene and financial management across Ghana, Zambia, Zimbabwe and India. With the increasing cases of food-borne diseases like cholera, dysentery and diarrhoea massive street food inspection as has been executed in Gambia are likely to be replicated in other parts of the region. In Nigeria, the

National Agency for Food Drug Agency (NAFDAC) has done a lot in relation to drugs, yet, there exists a huge vacuum in monitoring food vendors. Demands for accurate data and monitoring and evaluation from national statistical agencies and food and drug regulators are also expected, and would help raise and maintain the standard.

Locally, the horizon doesn't look like a barn of hopefulness. The provision of laboratories where sea foods are tested for pathogens and other related infectious organisms in food to help in curbing food poisoning. Perhaps some foreign development partner intervention is needed. The immediate hope lies in development agencies like the World Health Organisation and

national CSOs with health objective to step up their campaign on awareness to both food vendors and the public on methods of preparing food through hygienic means and other simple hygienic methods as hand washing and covering of food from exposure to flies. With increased awareness of the deadly implications, it is achievable.

**--Oluchi Agbanyim**

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See some examples here: <http://www1.american.edu/TED/oauwaste.htm>

# Monthly News and Current Affairs

Compiled by Oluchi Agbanyim



## GHANA - SEEKS INDIA'S

### HELP IN THE FIGHT OF WASTE

In a bid to tackle waste disposal in Accra and other urban parts of the country,

Ghana intends to import from India equipment worth millions of US dollars. The rising problems of waste have led to an outbreak of cholera from September 2010 to June 2011, leading to the death of about 400 people. Aside claims that most landfills are full, waste

collection contractors are attributing the problem to obsolete waste collection materials, and inaccessibility of the roads leading to cities due to heavy rains.

[Http://www.allwestafrica.com/220720119527.html](http://www.allwestafrica.com/220720119527.html)



## COTE D'IVOIRE- SILENT TRIBAL KILLINGS STILL

### ONGOING

Amnesty International has called on President Alassane Quattara of Cote D'Ivoire to urgently develop a comprehensive security system that would protect every citizen of

the country irrespective of their tribe. The call came following a recent research by the organisation alleging the Dozo ethnic group of silently killing the Guere ethnic group perceived to be supporters of Laurent Gbagbo. As a result of this, many displaced citizens are afraid of returning home. What is more worrisome is that the Dozo's appear to have the

support of the government officials due to the freedom they enjoy. Amongst other recommendations from the NGO is an immediate disbandment of all militia groups

<http://newafricaanalysis.co.uk/index.php/2011/07/ivory-coast-displaced-people-scared-to-return-home/>



## GHANA - e-WASTE TURNS POISONOUS IN WEST AFRICA

The donation of outdated, broken and usable computers by the western world to developing countries, particularly West African countries appears to be backfiring. What was originally intended for development has turned to a means of companies dumping waste in poor rural communities. The resultant effect is that villagers burn these wastes for copper and the fumes contaminate the soil and water.

<http://www.allwestafrica.com/250720119554.html>



## OBAMA PLEDGES TO SUPPORT DEMOCRACY IN AFRICA

The US president in a recent meeting held in the white house with Presidents Alassane Quattara of Cote D'Ivoire, Boni Yayi of Benin, Alpha Conde of Guinea and Mahamadou Issoufou of Niger stated that the US would remain a "stalwart partner" of democracy in Africa. The president while commended them on the free and fair electoral process in their countries.

[Http://allafrica.com/stories/201107300008.html](http://allafrica.com/stories/201107300008.html)



## NIGER TO START OIL PRODUCTION IN 2012

The production of oil is expected to compliment Uranium and fight for food shortage and famine. Prime minister had said plans are underway to complete the construction of the refinery and 462.5 km pipeline by end of 2011. The first barrels are expected by the first quarter of 2012.

<http://www.allwestafrica.com/170620119194.html>



## Waste Will Bring Wealth

*Prof Oladele Osibanjo is the Director of the Basel Convention Centre at the University of Ibadan, Nigeria. He has worked extensively on waste disposal and environmental issues in West Africa. He spoke with West Africa Insight's editor, Odoh Diego Okenyodo. Excerpts:*



### **In your view, is e-waste dumping in West Africa on the increase?**

Yes, it is, majorly in Nigeria, Benin Republic, Ghana, Senegal, and Cote d'Ivoire, but amazingly it is not a problem in Liberia.

### **Why is it not a problem in Liberia?**

It is very strange. I visited these countries. People in Liberia don't buy second-hand products. They rather go for new things.

### **Are there policies in place in these countries that prohibit dumping of e-wastes?**

The governments in West Africa, until recently, did not know that e-wastes posed a problem, and that was the challenge to policymaking. There are no policies or legislations. The National Environmental Standards and Regulations Enforcement Agency (NESREA) legislation

that was launched last month in Abuja makes Nigeria the only country with a law against this in the sub region.

### **You analysed the toxic waste dumped in Koko, a Nigerian community, way back in 1988. Has the practice of dumping toxic wastes abated?**

It remains a big issue. Again, we have no laws to control the illegal trafficking and dumping of toxic wastes by the developed world. In the early 80s, they dumped in the former Eastern Europe, Asia, South America, and then they faced Africa with West Africa as a major target. In 2010, 19 African experts that I led were trained on how the Europeans control illegal shipments at their ports. We are now organising step-down trainings in Ghana, Benin Republic, and Nigeria. Before that, from the training last year, we formed a network of institutions on the control of illegal trafficking of wastes in Africa. We are doing that in conjunction with IMPEL, the network of environmental law enforcing agencies in Europe, and because of this NESREA has been able to intercept many shiploads of e-waste. Many shipping companies are now afraid of bringing e-wastes to Nigeria. The agency is also accrediting importers of used or new electronic products.

### **You argue that food safety regulation in this sub region is poor and that four years away from 2015 we are not likely to meet the MDG on environmental sustainability and sanitation.**

### **What will be the prognosis of**

### **this state of affairs?**

Production of chemicals which may be dangerous to human health and the environment will increase because of more production and consumption activities. Some of the new products or chemicals have not been well tested for human and environmental safety. We will see increases in endocrine disruptions, abnormal incidences of cancers and tumours, child malformation, infertility and many things. Wellbeing of our people measured by life expectancy will decline. Every human being generates waste and with the expected population explosion as the world reaches 7 billion, so will waste increase in West Africa. Not wanting the tsunami of waste to overrun us, waste recycling and integrated waste management will become big business. A lot of the wastes contain precious metals like gold, silver and copper which can even earn more money in the international market than oil. Already, it's happening on a small scale where scavengers are living off refuse dumps. There will be more wealth from waste if governments put in place appropriate measures to encourage them. I have warned that by 2015, developing countries will produce more e-waste than the developed countries as we race to bridge the digital divide; businesses and NGOs will rise to tame this tide of wastes.