

Newsletter

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**New technology adopted
to curb fuel adulteration**

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Editors Note

Mr. Titus Kaguho

Dear readers welcome to another edition of the Energy and Water Utilities Regulatory Authority (EWURA). This fourth edition ushers in a new look for the cover page when compared to previous publications and contains a wider range of interesting articles relevant to the regulated sectors namely; electricity, natural gas, petroleum and water and sewerage.

This edition comes at a time when the Authority has adopted a new technology to curb adulteration, a malpractice that has cost Tanzania large sums of tax payers' money and damage to the economy in general, thereby forcing EWURA as a regulator to formulate various strategies to combat the problem.

The new technology in question uses a molecular fuel marker that can only be detected by X-Ray Fluorescence (XRF). The marker is invisible to the naked eye. It can only be seen after X-Ray Fluorescence is applied at depots when trucks are being filled, and only taxed gasoline, petrol and diesel products are marked.

Parallel to the introduction of new measures of fuel marking the Authority continues to take various measures against adulteration. The measures include imposing higher penalties (now between 7million and 100 million shillings), frequent random inspections, and the plan to introduce petroleum bulk procurement system and implementation of new road transportation rules.

The malpractice is caused by the difference in taxes between kerosene and diesel. This is a difference which gives temptation to unscrupulous business entities to cash in by selling kerosene as diesel. If experience from other countries is something to go by we now expect to contain the malpractice.

Apart from other interesting articles, this edition also illustrates various events in pictures taken during the course of conducting regulatory functions. It is our expectation that you will enjoy reading this edition.

From the Desk of the Director General



Mr. Haruna Masebu
DIRECTOR GENERAL

This edition contains the latest news of our regulated sectors for the period July to September 2010. It is with great pleasure that we continue to share our progress with you.

EWURA celebrated its fourth year of operation on 1st September 2010. During these past four years, EWURA has been at the forefront in promoting investment in regulated sectors and enhancing public awareness and knowledge of regulatory functions. There have been noted developments in the four regulated sector: electricity, natural gas, petroleum and water, such that EWURA continues to reach new milestones.

Today EWURA has a dedicated and enthusiastic staff of 85 in varying professions pertinent to the regulated sectors from 27 four years ago. EWURA is proud to say that its regulatory services have reached all corners of mainland Tanzania.

Since the commencement of EWURA's operations, it has continued monitoring the performance standards of regulated services. EWURA has taken and continues to take appropriate measures, as guided by the Tanzanian laws, against parties involved in the adulteration of petroleum products such that adulteration is now steadily declining.

During the financial year 2009/10, EWURA conducted 19 public hearings across Tanzania to seek comments and views of stakeholders on requests made by service providers in the regulated sectors. During the same period, EWURA determined four (4) electricity tariffs, two (2) natural gas processing and transportation tariffs, and 15 water tariffs. As of 30th June 2010, a total of 255 MW electric power capacity was installed. In addition, EWURA has licensed 765 retail operators of petroleum products, 65 wholesale importers of petroleum products, and 20 Urban Water Supply and Sanitation Authorities.

For this financial year 2010/11, EWURA intends to focus on monitoring compliance of standards for the outlook of petroleum service stations; combat adulteration of the petroleum products; introduction of bulk procurement of petroleum products; regulation of water supply systems through kiosks and bowzers; enhancing the quality and standard of water supply services. Further more it is EWURA's intention to facilitate in the attraction of investments in the regulated activities, particularly, electricity and natural gas infrastructure.

EWURA will continue to involve all stakeholders in every step it takes. I would like to take this opportunity to thank all stakeholders for their cooperation over the past four years. Together we will drive the Authority to greater heights. Kindly join me in reading interesting articles found in this issue of the EWURA Newsletter.

New technology adopted to curb fuel adulteration

Na Titus Kaguo



The Director of Petroleum Mr. Sirili Massay speaks to journalists during launching of fuel marking on September 1, 2010. Right is Technical Manager for Petroleum, Mr. Gerald Maganga

The Energy and Water Utility Regulatory Authority (EWURA) has introduced a new technology, touted as an effective tool in fighting rampant fuel adulteration and tax evasion.

The new technology, which uses a molecular fuel marker that can only be detected by X-Ray Fluorescence (XRF), was introduced under a partnership between a Canadian firm and EWURA.

The two-year contract between Euro Control Technics Inc of Canada and EWURA was signed in June 2010, and operations started on September 1, 2010, with the aim to curb fuel adulteration,

which has fast developed into a national crisis.

The Canadian firm specialises in the acquisition, development and commercialisation of innovative energy security technologies. It will implement the project through its wholly owned subsidiary, Global Fluids International S.A. (GFI). According to experts, the marker that is added into the fuel is sophisticated and mixed at the molecular level, and the detection system can accurately identify fuel alterations at accuracy and reliability levels of five and 99.5 per cent respectively.

The technology marks and detects deficiencies in all types of fuel. Experts say the inimitable and tamperproof marker injected into any type of fuel and does not alter the fuel or its properties.

EWURA's Petroleum Technical Manager, Mr Gerald Maganga, said the marker is invisible to the naked eye. It can only be seen after X-Ray Fluorescence is applied.

He said fuel would be marked at depots when trucks are being filled and only on taxed gasoline, petrol and diesel products would be marked.

"This means that petroleum products destined for other countries (un-taxed), which are imported through Dar es Salaam Port will not be marked. The system will easily enable us to detect the petrol or diesel, which has been illegally mixed with kerosene (adulterated), as kerosene carries a different marker from the one used in petrol and diesel," he said.

According to Mr Maganga, the identification of adulterated fuel would be done within five minutes and does not require a laboratory analysis.

He advised fuel transporters to install tracking systems that would enable them to follow up their vehicles, and also to seal all openings that could be used for the adulteration or offloading of petroleum products from fuel tankers.

Since September 1, 2010, GFI has been busy marking petroleum products at Dar es Salaam-based fuel depots in a move that would ensure that the country reduces fuel adulteration.

At the launching of the technology in Dar es Salaam, EWURA's Director of Petroleum, Mr. Sirili Massay, told journalists that the XRF detector, fitted in a vehicle, would be a mobile spot-check system verifying the quality of fuel.

Random inspections

Mr. Massay said random inspections that produce instant results would be conducted countrywide soon after the energy regulator has ensured that all unmarked fuel on the market has been sold out. GFI head of marketing in East Africa, Mr. Mick Gross, who attended the launch of the operation,

said the technology was environmental friendly and could not be altered.

Mr. Gross said the technology, which has been adopted in many other countries where fuel adulteration was rampant, was very effective in petroleum products and crude oil marking and testing.

"The problems posed by such commercial malpractice are many. Adulteration not only compromises consumer welfare and reduces government excise revenue, but also sub-standard fuels affect engine combustion and cause serious threat to public health," Mr Gross said.

EWURA has, for a long time now, been slapping fuel adulteration culprits with heavy penalties, and conducting frequent random inspections in a bid to end the malpractice.



Technical Manager for Petroleum, Mr. Gerald Maganga (left) listens as the GFI officers demonstrate to journalists how to mark fuel. The exercise took place in Dar es Salaam on September 1, 2010.

EWURA Board inspects power infrastructure

By Michael Mshighwa



EWURA Board members inspect one of the sites of power infrastructure in Tanga in July 2010.

In an effort to combat information asymmetry, EWURA Board Members visited power plants in Tanzania starting with Tanga and Kilimanjaro regions. The visit that was conducted in mid July 2010 was led by Ms Lucy Sondo. The delegation comprised Mr. Haruna Masebu, EWURA's Director General, Eng. Nerei Msimbira, Eng. Vicent Gondwe and Mr. Omar S. Bendera who are all members of the Board.

Also included in the delegation was the Director of Electricity, Eng. Anastas Mbawala and Principal Customer Service Officer, Mr. Michael Mshighwa.

The delegation Surveyed TANESCO's power generation plants at Hale and Nyumba ya Mungu, to get on the ground experience and challenges faced over years of power supply operations. The delegation also paid a visit to TANESCO Regional Offices at Tanga and Moshi with the aim of understanding the issues of power distribution and customer services within the City of Tanga and Moshi Municipality.

The delegation surveyed TANESCO's Majani Mapana Substation in Tanga and Kiyungi Substation where they were briefed on the challenges faced by TANESCO with regards to power transmission and distribution in Tanga and Kilimanjaro regions.

Tanga Cement Company Limited's cement manufacturing plant was also visited, as being one of the large power consumers; the discussions were centred on power supply issues. Members of the Board also visited Mkonge Energy Systems Co. Ltd and TPC, being small power producers at Tanga and Moshi respectively.

At TANESCO's Regional Office in Tanga, the Board noted a public outcry from big consumers on low voltage. TANESCO reported that the problem has considerably reduced after the completion of 132 kV line constructed from Hale and 33 kV line from Majani Mapana Substation. The other challenge the TANESCO regional office is facing are delays in payment of bills from customers and forgery done through LUKU.

At Tanga Cement Company Limited, the Acting Managing Director Ms Jane Nyimbo said her firm had a critical concern on the stability and quality of power supply from the country's power utility firm (TANESCO) as compared to tariff increment. She pointed out that the cement manufacturer and other intensive power consuming would like to see the power supply quality improve with the planned increase in tariff, to minimize losses that are the result of poor supply quality.

At Pangani and Nyumba ya Mungu Power Plants, EWURA's delegation was briefed about low power generation as one of the major challenges facing TANESCO. It was pointed out that the low generation is caused by a number of reasons, including aging of the machines and rapid change in technology which makes it difficult to obtain spare parts for the old machines, bearing in mind that some of the manufacturers are no longer existing.

Another factor contributing to low generation is shortage of water due to multiple use of the water that is competing with power generation. Reports have it that of recent there has been an increase in the number of water users that has significantly reduced the amount of water that reaches Hale and Pangani Falls for power generation.

Statistics indicate that only 10 per cent of released water from Nyumba ya Mungu reach Hale while the remaining 90 per cent consumed by other players, mainly in irrigation schemes, without returning excess back into the river course. The EWURA delegation offered some ideas to minimize the loss of water from abstraction, including the

possibility of constructing another regulating dam between Nyumba ya Mungu and Hale.

At TANESCO in Moshi office, Board was briefed on a number of challenges facing the region including a serious problem of power theft and worse enough cases that have been reported to Police have remained unattended to. Meter tempering that significantly reduces TANESCO's revenue was reported to be the next big challenge the utility firm is facing. The other challenge is poor settlement of bills that has prompted TANESCO to concentrate on revenue collection rather than new connections.

At Tanganyika Plant Company Limited, the Board surveyed the TPC sugar processing plant and the state of art power generation plant that has been developed by the firm. The Board witnessed the use of bagasse (the sugarcane waste) to produce power using a high efficiency boiler and turbo generator to produce energy for its own use. The generator has a capacity of producing 20 MW.

At Mkonge Energy Systems Company Ltd (MES), the Board visited the entire process of producing the Biogas derived from the sisal decortication plant. Then the team saw the fermentation of the waste materials from decorticating sisal leaves to produce biogas. The biogas, collected and stored in tanks is then used to run two 150 kW electricity generators. The MES has applied for the electricity generation licence from EWURA. Part of the power generated will be sold to TANESCO under the Standardized Power Purchase Agreement (SPPA).



EWURA's head of delegation Ms. Lucy Sondo seeks clarification on one of issues raised by Tanga Cement Ag Managing Director Ms Jane Nyimbo (Right) during the visit to inspect power infrastructure in July 2010.

Licensing of electrical contractors, wiremen transferred to EWURA

By Titus Kaguo

The Government has transferred the licensing of electrical contractors and wiremen to the Energy and Water Utilities Regulatory Authority (EWURA), it has been announced.

According to the Directorate of Electricity, all licensing activities, which were previously handled by the Ministry of Energy and Minerals, are now under EWURA.

The transfer follows the endorsement of the Electricity Act Cap 131 of 2008, which gives EWURA the mandate to license all electrical installations, among other activities.

“The licensing of electrical installation personnel in the country, which used to be under the Ministry of Energy and Minerals (MEM) was transferred to EWURA pursuant to the amendment made in the Electricity Ordinance Cap 131 of 1957,” says Eng Anastas P. Mbawala, the Director of Electricity at EWURA.

“EWURA, which came into operation in 2006, among other issues, handles all matters pertaining to the licensing of electrical contractors and wiremen, and monitoring their conduct.”

Currently, the regulator is updating the Electrical Contractors' Register. The process includes the issuing of new licenses to replace those that had been issued by the Ministry of Energy and Minerals.

In this regard, electrical installation contractors and wiremen, who hold licenses issued by the Ministry, are now required to submit their original licenses and pass cards for them to get new ones from EWURA, Eng Mbawala notes.

He says that failure to do so will lead to their deletion from the register of electrical contractors and wiremen. In addition, new licenses will only be issued to contractors without outstanding annual licensing fees.

All electrical contractors who have paid their annual licensing fees to Madini offices should also submit their receipts and two passport size photos to EWURA before they can get new ones.

Regulators discuss TAZAMA Pipelines

By Titus Kaguo

The Energy and Water Utilities Regulatory Authority (EWURA) and its Zambian counterpart, the Energy Regulatory Board (ERB) are set to increase and formalise their partnership following a joint meeting held recently in Dar es Salaam.

At the meeting, EWURA and ERB agreed on the need to harmonise their regulatory tools, especially in the petroleum sector. The two regulators are now looking at how best to regulate the cross border TAZAMA Pipelines.

EWURA and ERB officials met in August 2010, to discuss the regulatory regime of TAZAMA and plans by the Tanzania Ports Authority (TPA) to replace the obsolete Single Point Mooring (SPM), which is used to offload Zambian crude oil in Ndola, Zambia.

ERB Acting Director General Mr. Lukonde Mfula, said his Board had received an application from TAZAMA to renew the licence for transportation of petroleum products for 15 years.

EWURA's Director of Petroleum, Mr. Sirili Massay, informed the meeting on the status of the pipeline joining the SPM and TAZAMA tank farm. He noted that the 36-inch pipeline should be replaced immediately as it had previously ruptured due to corrosion and spilled products.

Environmental Compliance Monitoring

Discussions also centred on the need for a common approach in monitoring environmental compliance of TAZAMA Pipelines operation on both the Zambian and Tanzanian sides. The officials agreed that ERB would share notes on the subject, including the code of practice for pipelines operations.

It was also agreed that ERB and EWURA should meet in the near future to discuss TAZAMA Pipelines

compliance with regulations and best practice before ERB grants their application for a 15-year license.

EWURA promised to visit TAZAMA Pipelines facilities on the Zambian side to familiarise with operations. Other relevant regulatory aspects to be observed by EWURA include pipeline tariff, security, safety, health and environment.

Petroleum products transportation

Meanwhile, discussions are ongoing in Zambia on the possibility of closing the Indeni Refinery, and converting the TAZAMA Pipelines to transport refined petroleum products to Zambia. This can open up several possibilities for using the pipeline, including products transportation to regions traversed by the pipeline in the Southern highlands of Tanzania. It could also be used to move transit products to DRC. This is an alternative that Tanzania may discuss with Zambia and DRC.

Liquefied Petroleum Gas (LPG) Development

The ERB is currently working on a programme to increase the usage of LPG to counter deforestation, and also as an alternative energy source for cooking, especially in isolated off-grid and rural areas. The strategies they are putting in place could be shared, and used in Tanzania as well.

The Way Forward

ERB extended an invitation to EWURA to participate in the TAZAMA Pipelines licensing process, and discuss the harmonisation of standards to be applied on both sides by the regulators.

The two energy regulatory authorities also agreed to share the standards and codes of practices on petroleum pipelines, road transportation of petroleum products, and other relevant documents. It was proposed that EWURA and ERB sign an MOU for collaboration in regulatory matters.

Adverse effects of petroleum adulteration

By Eng. Julius R. Gashaza

Adulteration can be defined as an introduction of a foreign matter or substance into petrol or diesel illegally thus resulting in a product that doesn't conform to specified standards.

The foreign substances are called adulterants, which when introduced alter and degrade the quality of the base transport fuels.

Tanzania imports only refined petroleum products. These include petrol, commonly known as petrol super; gasoil diesel; illuminating kerosene (IK) alias kerosene; jet fuel (Jet A1); and Heavy Fuel oil (HFO). Of these petroleum products, the first two - petrol and diesel- are the major transport fuels consumed in Tanzania.

During Financial Year 2009/10 Tanzania imported 726 million litres of diesel and 369 million litres of petrol, which is equivalent to 46.50 per cent and 23.60 per cent, respectively, of the total imported volumes for local consumption. The rest were 15.9 per cent for kerosene, Jet A1 and for HFO.

More than 90 per cent of imported petroleum products pass through the Dar es Salaam Port and are received in oil terminals located within the vicinity of the port before they are transported to inland depots and various petrol stations.

For the past four years, EWURA has vigorously embarked on fighting against adulteration of transport fuels. The malpractice has become a major concern in the country. Transport fuels are often adulterated with other cheaper products or by-products for quick monetary gains. For instance, petrol is believed to be mainly adulterated with natural gas liquids (gas condensate) while gasoil (diesel) is mainly adulterated with kerosene.

CAUSES OF FUEL ADULTERATION

Financial incentives arising from different levels of taxes are generally the primary cause of fuel adulteration. In Tanzania, petrol carries a much higher tax than diesel, which in turn is taxed more than kerosene. Dealers indulge in the adulteration of petrol and diesel primarily due to the significant price difference between these products and the adulterant.

Various estimates can be calculated, as will be demonstrated below, of the extent of financial loss to the national exchequer and the oil companies as a result of adulterating automotive gasoil with kerosene. The effects also spread to machinery as a result of the use of low quality diesel.

While there could be other reasons for malpractice, basically, the following primary factors encourages the practice of adulteration in Tanzania:

- Existence of differential tax levels amongst the base fuels, intermediate products and byproducts. Because the adulterants are taxed lower than the base fuels they give monetary benefits when mixed with a proportion of the base fuels; for instance the difference in taxes between diesel and kerosene is TZS 462 per litre.
- Differential pricing mechanism of fuels and adulterants.
- Easy availability of adulterants in the market;
- Lack of consumer awareness;
- Lack of transparency and uncontrolled regulations in the production-supply and marketing chain for intermediates and byproducts of refineries; and
- Non-availability of mechanisms and instruments for spot-checking the quality of fuels.

THE CONSEQUENCES OF FUEL ADULTERATION

Adulteration of transport fuel, leads to economic losses, increased emissions and deterioration of

performance and parts of engines which use the adulterated fuels. Some of the effects of adulteration are outlined below:

- Malfunctioning of the engine, failure of components, safety problems etc. The problem gets further magnified for high performance modern engines; The addition of kerosene to diesel affects basic properties of the product, such as viscosity, as the diesel loses lubricity characteristics, which leads to damage of injector pumps (because friction injector nozzles are heated up and consequently expand).
- Adulteration of fuel can cause health problems directly in the form of increased tailpipe emissions of harmful & sometimes carcinogenic pollutants.
- Increased tailpipe emissions of hydrocarbons (HC), carbon monoxide (CO), oxides of nitrogen (NOx), particulate matter (PM) and can also cause increased emissions of air toxin substances;
- Adulteration leads to significant loss of tax revenue. Consider the current tax ratio scenario for the three products namely gasoline, automotive gasoil and kerosene pegged at Sh539/litre, Sh514/litre and Sh52/litre, respectively. An in-house experiment indicates that adulteration of IK can be made up to the tune of 30 per cent into diesel. An operator with outturn of 100 million litres of diesel, which has been adulterated with kerosene leads to Government losing its statutory revenues of Sh13.86 billion.
- Financial loss due to damage of engines.

EFFORTS TO CURB ADULTERATION

It is believed that adulteration has existed in Tanzania for many years. The environment that attracts adulteration has been in existence long before EWURA became operational in June 2006.

For the past four years EWURA has conducted several point checks for the quality of petroleum products by sampling petrol and diesel mainly at petrol stations.

Other measures taken to address the problem include random sampling and testing of petroleum products introduction of fuel marking, revising of petroleum rules on penalties, creation of public awareness campaign and introduction of transportation rules.

Random Sampling and Testing of Petroleum Products

From May 2007 to June 2010, a total of 432 retail outlets in Tanzania mainland regions were sampled.



GFI officials mark fuel on one of the fuel tankers as one measure to combat adulteration in Dar es Salaam on September 1, 2010.

Among these, 210 outlets (equivalent to 48.6 per cent of all the sampled retail outlets) were found to be selling or found in possession of products for sale, which did not meet TBS quality requirement.

In the same period, 233 petrol stations, 24 depots and 40 fuel tanker trucks across the country were randomly sampled. Among these, 36 per cent of retail outlets, 29 per cent of depots and 55 per cent of tankers were found to have products that were out of TBS specifications.

Trend analysis of incidents of retail outlets found trading out-of-specification products from random inspection sampling done in a quarterly period from May 2007 to date has shown that there has been an improvement in the quality of fuel sold as adulteration level decreased from 78 per cent in May 2007 to 40 per cent by June 2010 as it can be seen in Table 1 and Figure 1 below.

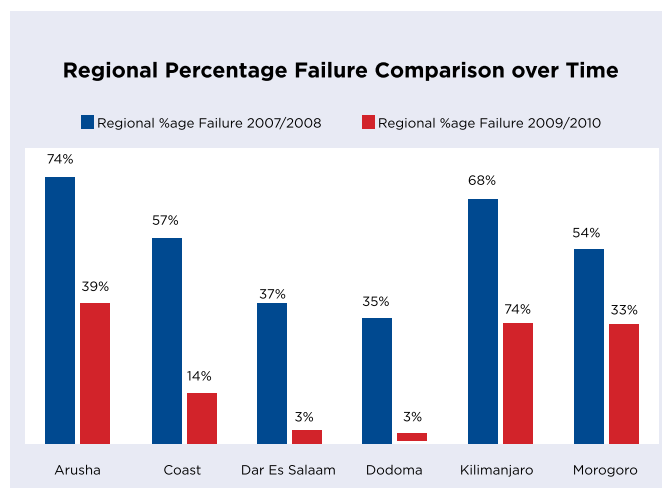
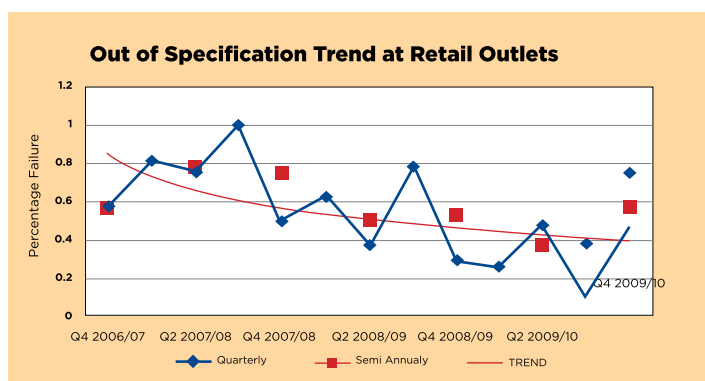
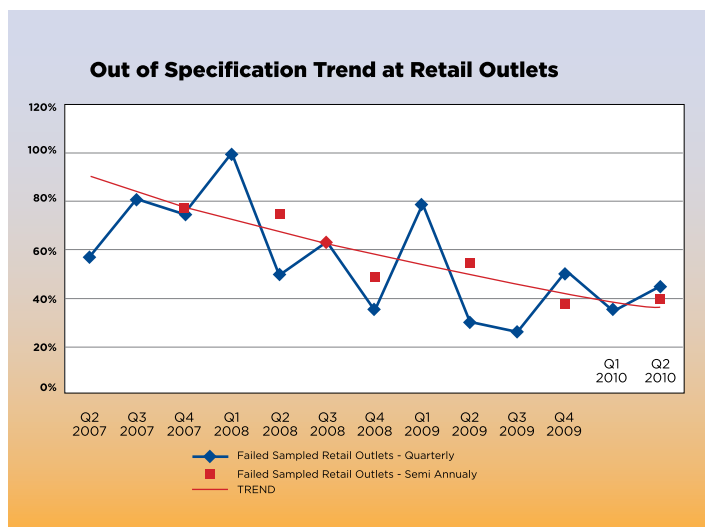
Reading through the above analysis, it is obvious that in the supply chain, petrol stations and road tankers are mostly involved in adulteration practices. Few cases were observed in depots (29 per cent).

Punitive measures were taken against operators of the facilities that were found with off specification products, including closure of the petrol stations and depots for twelve months.

Achievements of Fuel Quality Monitoring

The evaluation of the success or failure of the fuel quality monitoring exercise adopted by EWURA as means to curb fuel adulteration can be done by comparing test results for the financial year 2007/08 when we started the exercise, with results of the financial year 2009/10.

These comparisons are from random sampling in the regions that are regarded as most notorious for fuel adulteration, but are illustrative of the whole country. It can be seen that there is quite a significant decrease in cases of retail outlets being found possessing out-of-specification products. The test results of the six sampled regions have shown a clear improvement in quality of products as depicted in Figure 3.





EWURA regulates: Electricity, Petroleum, Gas and Water Services

Our Vision

Quality, affordable and sustainable energy and water services for all.

Our Mission

To champion the delivery of energy and water services through world class regulation for the enhancement of the welfare of the Tanzanian society.

Our Duties

- Promoting effective competition and economic efficiency
- Protecting the interests of consumers
- Protecting the financial viability of efficient suppliers
- Promoting the availability of regulated services to all consumers including low income, rural and disadvantaged consumers
- Taking into account the need to protect and preserve the environment when performing its functions
- Enhancing public knowledge, awareness and understanding of the regulated sectors including rights and obligations of consumers and regulated suppliers, ways in which complaints and disputes may be initiated and resolved and the duties, functions and activities of the Authority.

Our Functions

- Issue, renew and cancel licences
- Initiating establishment of standards for goods and services
- Establish standards for terms and conditions of supply of goods and services
- Regulate rates and charges
- Make rules
- Monitor the performance of regulated sectors in relations to levels of investment, availability quality and standards of services, cost of services and efficiency of production and distribution of services.
- Facilitate the resolution of complaints and disputes.

KASHWASA: A bulk water supplier in the heart of semi-arid land

By Hawa Lweno and James Diu

At first glance, Shinyanga appears to be a very dry and dusty land. Yet the region has rich gold and diamond mines, money-spinning cotton farms and a huge population of livestock which effectively make it one of Tanzania's strategic economic centres.

Shinyanga is additionally home to one of the most ambitious water development schemes ever initiated by the Tanzanian government. The water scheme in question draws fresh water from Lake Victoria and channels it through approximately 200 kms of steel pipes in order to reach Kahama and Shinyanga towns.

Its first phase is reported to have cost the government approximately Shs 250 billion. However, its most striking feature is its impressive scale and potential. Consequently, it is set to usher in new life to thousands of people through the supply of bulk water to the two administrative regions.

The operation and maintenance of this scheme is the primary responsibility of the Kahama/ Shinyanga Water Supply and Sewerage Authority (KASHWASA).

Clean and safe water

Since its establishment in 2009, KASHWASA's mandate has been to oversee the delivery of quality, clean and safe water to Kahama and Shinyanga towns, as well as to over 54 villages located along the water transmission pipeline in Mwanza and Shinyanga regions, namely villages in Missungwi, Kwimba, Shinyanga and Kahama districts.

Altogether, KASHWASA serves an estimated 450,000 people. This figure is expected to increase to one million by 2025. Currently, urban and village customers consume 90 per cent and 10 per cent of the bulk water produced by KASHWASA respectively.

There are many operational challenges but amid the hurdles, perhaps one of the secrets behind the success of KASHWASA operations is the youthful, energetic and committed staff, which has always been at the forefront of fulfilling the utility's ambitious vision of becoming the best and most reliable supplier of clean and safe water. The water utility's efforts have not gone unnoticed.

KASHWASA has often been described as a prime example of Tanzanians diligently working together to bring about positive change to an area plagued by poor water resources, but endowed with huge potential for socio-economic development.

Subsequently, the Energy and Water Utilities Regulatory Authority (EWURA) is keen to see the successful commercialisation and autonomisation of this initiative.

Surmounting the challenges

During a recent visit, members of the Board of Directors of EWURA showered praises on KASHWASA.

They congratulated the authority for overcoming the challenges it faced through its exemplary innovations and creativity, which has sustained the project and enabled the bulk water service delivery.

The purpose of the visit that took place between 23-26 August, 2010 was to familiarise the Board Members with the operations of the mammoth water project. The visiting team also wanted to learn from the experience, assess the challenges that the water project is facing and recommend measures to help KASHWASA deliver its services more sustainably.



Fuel conservation saves your money

By Mariam Mmbaga

Dear readers, just as we read in our last newsletter that we can save money from water bills by conserving the precious liquid, we can also save money from fuel conservation. You may as well consider yourself an environmentalist! A little fuel conservation can really help both the environment, and your wallet! The price of petrol seems to be always on the increase. The best defence against rising fuel prices is fuel conservation.

How:

Vehicle maintenance is important. Great fuel conservation starts before you even hit the road:

- Keep your vehicle properly tuned; it can get better fuel mileage.
- Keep your tyres aligned and inflated properly. You should check your tyre pressure once a month. For instance having tyre pressures that are too low can increase your use of fuel by three per cent.
- Replace your air filter at regular intervals. Check the battery and radiation levels to ensure that they meet the standards set in the dealers manual. Misfiring plugs, inefficient fuel system or malfunctioning emission controls waste up to 15 per cent of fuel.
- If you are not using your roof-racks, take them off! They add unnecessary weight on your car, and can also take away good fuel mileage (this does not mean that you can throw your neighbor out of the car to conserve fuel... although, it would help!)
- Another way to start good fuel conservation is to plan ahead. Combine your errands into one trip. Think about riding your bike, walking, riding the bus, or car pooling when possible and reasonable.

Fuel conservation can greatly be improved while you are driving or at the pump:

Slow down! The faster you drive the more gas you use! Besides, you will have a safer drive when you slow down, too. Quick starts are not only hard on the vehicle, but use a lot of fuel. A heavy foot when the light turns green also consumes more fuel.

Avoid rapid accelerating and braking, and when you use the accelerator, do it gently. There is a reason why it is called "stepping on the fuel." The harder you step on the fuel, the faster you use up your fuel. Relax your driving style. Do not drive aggressively. Accelerate slowly. Driving aggressively

can lessen your fuel conservation by 30-40 per cent. Not only is this a waste of fuel, it is also dangerous to those sharing the road with you.

Make sure you know where you are going in advance; lost fuel, patience and safety are jeopardized while looking for the correct route or lane.

- lost fuel, patience and safety are jeopardized while looking for the correct route or lane.
- Do not tailgate because it will lead to unnecessary braking and then acceleration.
- Do not idle. Modern cars no longer need to warm up to run.
- Turn off your car when you are waiting for someone.
- Your cruise control will add to your fuel conservation (of course, it is unreasonable to use it while just driving around town.)
- Your use of the air conditioner lessens your fuel economy, as well, especially if you use it at 65 kmph or more. Why not just open the window to cool off? Park your vehicle in the shade.
- Using overdrive will lessen your fuel consumption while on the highway. Drive at the highest appropriate gear.
- While at the fuel pump, use the suitable fuel for your car - check your owner's manual.
- Fill up your car with fuel early in the morning and on cooler days. The colder the fuel is the more compact it is... you will, therefore, end up getting more value for your money.

This may seem like a long road to fuel conservation, but even just doing a few of these things can really help improve your fuel mileage. You could possibly improve your fuel conservation by 40 per cent or so by following some of these tips. If all of these suggestions seem overwhelming, just take a few at a time. The road to great fuel conservation can be a long one. Most all of the tips that we have given as of yet can be found in greater detail from other resources. All of the tips on fuel conservation that we have given you so far have to do with the vehicle that you already have. If you are planning on going out and buying a new vehicle, consider a vehicle that conserves fuel by design. Check out the hybrids or smaller cars. A hybrid vehicle may cost more at the onset, but you will surely save money in the end, especially if fuel prices continue to rise.

The first step to fuel conservation is education, so congratulations for being interested! You have passed the first step. Now go out there and start conserving fuel!

Informed team through Newspaper clips

By Richards LT Mhaha

Periodicals have proven to be of considerable high value in information centres and libraries. Most often, it is because of the informative articles they contain. But in some cases it is due to their attractive illustrations and advertisements.

A periodical article may be valuable because it offers short and stimulating reading on a topical matter, or because it gives reliable information on critical issues. Newspapers are just but one in the range of periodicals that information centres and libraries acquire for use.

A common practice in industrial libraries and information centres has been to circulate all current copies of periodicals to readers who request such a service. However, the antithesis of the two fundamental academic library principles is:

- That current copies of periodicals must be available to all readers; yet
- It is up to the readers to go to the library or information centre, rather than vice versa.

Newspapers for instance, have greatly increased over the last two decades, from at least seven in the 80's to over 40 at the moment, but they have been hit hard by some practical difficulties in their usage, which have caused a reconsideration of circulation strategies.

Apparently, there is still so much work to be done, including solving the delays between the first and the last reader on each circulation list. Likewise, the lack of a readership culture, even where back copies of periodicals are available for loan, few readers would borrow them.



Information is power

Yet, the adage that information is power cannot be over emphasised. The number of periodicals and or newspapers to be acquired depends much on the availability of resources, and other factors such as the size and type of institution and the diversity of information readers need.

In addition, more care is needed in the selection of titles, and the usage will require effective promotion strategies to ensure information contained in the periodicals is

disseminated and made use of by the target group. This ensures value for money for the subscribed periodicals.

More so, news, opinions, cartoons, articles, advertisements and other items of general public interest contained in newspapers cannot be underestimated in shaping the society. Newspapers are the most frequently published periodicals. And since the majority are dailies and weeklies, they are important as information sources due to frequency and timeliness.

However, it would be a time consuming task for a busy team to sit down with piles of newspapers each day, and frantically scan through headings and contents on each page tracing articles of interest. So, having considered such factors, the need to capture and compile newspaper clips was inevitable.

The need to promote periodicals, and particularly the usage of newspaper clips, lies on the many benefits that result from a larger availability of both scientific and technical information. Information defined as knowledge in communicable form, is recognised today as one of the main requirements for development.

Staff at information centers can no longer afford to ignore the psychological, technical, sociological and political changes taking place in both the external and internal environments of their organisations. Their impact is a two-way process. Changes in the external environment affect the organisation's internal environment, whilst decisions made at managerial level will equally impact both the external and internal environment. As a result, a major and increasingly important duty of management is to place the library or information centre strategically in order to ensure its continued success and security, and that it is effective as a disseminator of information.

EWURA's daily compilation of newspaper clips endeavours to meet the need for an informed team that in turn will strengthen our audience's understanding in the four regulated sectors as well as improve our abilities to engage with all stakeholders.

Scholarly articles on the petroleum sector, electricity, natural gas and the water and sewerage matters, all are informative, educative, enlightening to our zealous team in ensuring a percentage contribution in the nation's MDGs achievement.

Editorial columns, serial columns like the 'Oil Watch', and the 'Petroleum Products' price surveys, are but some of the useful coverage by our team, stakeholders, and indeed researchers in the fields.

More so, the need for a well-structured information system is an important component in the generation, processing, packaging and dissemination of information in any social system. A timely informed team institutes a timely cause of action towards that nature of information.

A highly dedicated staff

EWURA, apart from subscribing to a range of newspapers, also ensured it recruits a highly dedicated information processing staff. The availability of IT infrastructure, including migrating from a small low speed to a higher speed bigger scanner makes information processing for the newspaper clips easy and convenient.

A dedicated server for information storage and retrieval for dissemination makes archives of the newspaper clips safe for much longer time, unlike the poor quality paper of the hard copies of newspapers that becomes yellow and brittle with age.

Information dissemination is a means of communication. Communication is a fact of life. All human interaction is dependent upon communication for the exchange of information and the conveyance of ideas. Information or ideas do not themselves constitute communication. Communication occurs when the messages flowing between two parties have arrived at a stage where the images and ideas each is trying to pass to the other have the same meaning to the receiver as to the sender.

Feedback, therefore, is a necessary part of communication. Until feedback is received, the sender does not know how the recipient or associate is feeling about the service.

We thank all those who comment on the newspaper clips. Because of your feedback we were able to take and continue taking corrective and necessary actions.

In the course of improving our services, our information centre continues to be innovative in ensuring the provision of effective and efficient services, which are relevant to our users. Upgrading our ICT further to compress the digitalised newspaper clips will improve information dissemination. Furthermore, the purchase of a modern colour photocopier will enable us to capture original background images from the newspaper cuttings as well as keeping our team informed and broaden the usage of the newspaper clips to other stakeholders.

EWURA, just like other authorities, has a mission and vision to accomplish. And, we are not oblivious to the challenges we are facing and those that we are likely to face in the future. The strengths we have taken pride in during this period do not leave us complacent. On the contrary, we will continue keeping the fire of our strong regulatory team burning through compiling and disseminating daily newspaper clips as sourced from periodicals, and particularly the frequently published newspapers.

It is our sincere hope that readers of the newspaper clips will increase in our future circulation, and convey feedback with regards to this crucial service. We also hope that our committed information team and the efficiently run information centre will work out on the feedback received to improve the service to the clientele's expectations.

✦ Events In Pictures



1. The PS for Ministry of Water and Irrigation, Eng. Christopher Sayi receives a certificate after attending a course on regulatory impact assesment in Washington DC, USA in August 2010. 2. Eng. Sayi exchanges views with EWURA's Head of Communications and PR Mr. Titus Kaguo chat during an interval taken in between the course on regulatory impact assesment in Washington DC, USA in August 2010. 3. EWURA 's delegation and TANCOAL official at a coal extraction site in Songea during a visit in October 2010. 4. EWURA delegation exchanges views with Sao Hill officials at a site for electricity generation. 5. EWURA Board Members and Sisters of St. Benedict Mission inspect the surrounding areas of the hydro power plant in Chipole, Songea. 6. Sister Mwalongo, the only operator of the hydro power plant in Chipole, explains to the board members how the turbines work.

✦ Events In Pictures



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7. TANESCO's Regional Manager for Tanga, Eng. Samwel Makalla in talks with EWURA Board Members during a visit in July 2010. 8. Petroleum dealers during a training session that was held in Arusha in October 2010. 9. Global Fluids International (GFI) officials demonstrate testing of adulterated fuel at the Karimjee Hall in July 2010. 10. A cross section of petroleum dealers in Tanga region during a training by EWURA in October 2010. 11. EWURA Board Members at a KASHWASA water source during a visit in August 2010. 12. Uganda government officials listening at a presentation by an EWURA official during their visit to Dar es Salaam in July 2010.