

## EfD-Kenya Water Policy Day – 27<sup>th</sup> October 2014

### **Welcome and Introduction**

Environment for Development in Kenya (EfD Kenya), at the School of Economics (SoE), University of Nairobi (UoN) in collaboration with the Kenya Institute for Public Policy Research and Analysis (KIPPRA) organized a Water Policy Day which was held on October 27, 2014 at the Sarova Panafric Hotel, Nairobi. The objective of the workshop was to share and receive feedback on ongoing research work on water sourcing in rural Kenya, increasing block tariffs and relationship between income and water use in Kenya as well as ventilate on the water policy direction in Kenya.

Prof. Peter Kimuyu (School of Economics, University of Nairobi and Executive Committee Chair, EfD Kenya) opened with a warm welcome to the participants. The welcome was followed by a brief by Prof. Jane Mariara (School of Economics, University of Nairobi, Coordinator, EfD Kenya) on the Environment for Development initiative's work. She outlined how EfD Kenya has recently been focusing on water for development and carries out research in environmental areas and how these areas are linked to sustainable development. The policy relevant research looks at how water contributes to development through local research agenda undertaken by stakeholders in collaboration with international researchers who, together, combine expertise to look at policy issues. Prof. Mariara also highlighted the importance of an organization such as EfD in developing countries in helping to narrow the capacity gap in terms of research, analytical skills and communication/dissemination.

### Opening of the Workshop by Engineer Samuel Alima, Deputy Director, State Department of Water Services, Ministry of Environment, Water and Natural Resources

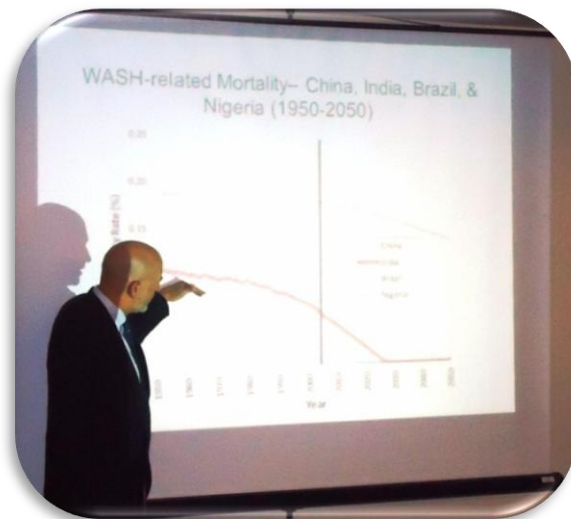


The workshop was graced by the Deputy Director of Water Services from the Ministry of Environment, Water and Natural Resources (MEWNR), Engineer Samuel Alima. Eng. Alima opened the meeting with an illuminating speech on behalf of Eng. Simitu N. Lawrence, the Director of Water Services at MEWNR. In the speech, the Government of Kenya's commitment to water for all by 2020 was highlighted, as well as a commitment to sustainable management of water resources. Challenges to achieving the above were mentioned. These included destruction of water catchment areas, increased competition and conflicts in natural resource utilization, low sewerage coverage, pollution, poor waste management, and water scarcity.

He reiterated that Kenya is experiencing rapid population growth and there are inefficiencies due to high non-revenue water. Eng. Alima added that strategies to reduce these inefficiencies have been developed. He then wished the participants a fruitful and enriching discussion and the meeting was opened.

### Global Context on Water Policy by Prof. Dale Whittington (University of North Carolina, USA & Manchester Business School, UK)

Prof. Whittington then took the reins to discuss the global context on water policy. His presentation utilized data from several regions and timelines to illustrate what is likely to occur in the coming years in the Water and Sanitation (WASH) arena. He argued that health and water problems and WASH-related mortalities in sub-Saharan Africa (SSA) will be solved in a generation or two. The health problem will decline, but the economic and financial issues of water will increase. This is due to the fact that water utilities around the world are heavily subsidized and it is increasingly becoming difficult to provide and maintain water services. With climate change, more revenues are needed. In India, Brazil, East Asia among other regions, there is a decline in WASH mortalities. Across the regions, it is only in SSA where WASH-related mortality rates are on the rise.



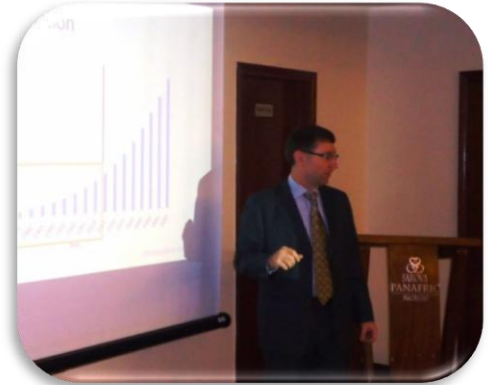
The WASH mortality categories in SSA countries show a high mortality rate in the Democratic Republic of Congo, which is stagnant but with a moderate decline in Ethiopia. Kenya and Nigeria have moderate mortality rates which show a sufficient and insufficient decline respectively. The low mortality groups in Africa are mainly the smaller countries and South Africa. Focus is therefore on the high mortality group where the rate is either stagnant or showing a moderate decline. Kenya has a moderate mortality rate with a sufficient decline and a key concern is what happens if per capita income in Kenya increases.

A very interactive discussion arose from Prof. Whittington's presentation. One participant asked about the global decline in mortality rate in 1990 and questioned if what caused it could be used today to reduce mortality rates in SSA. The response was that that decline was due to a combination of factors, for example, health care systems getting better and vaccination increasing, improved nutrition, water chlorination, education, higher incomes and lower family sizes. Due to all these factors, it is difficult to know the WASH mortality proportion of the overall mortality. Children die of diseases like diarrhoea and there are no death certificates in some countries, hence data collection challenges resulting to no exact absolute figures. However, globally, there is a general decline in WASH related mortalities except in SSA.

Mortality can be grouped depending on the cause as studies on improved sanitation exist, but the baseline is not known.

### Increasing Block Tariffs (IBTs) and Subsidy Incidence: The Case of Nairobi, Kenya - David Fuente (Kenan Fellow and PhD student, University of North Carolina)

David Fuente presented preliminary findings from the [Increasing Block Tariffs and Subsidy Incidence](#) project. Other researchers involved in this project are Prof. Jane Mariara (Director, School of Economics, University of Nairobi, and EfD-K Coordinator), Mbutu Mwaura (Monitoring and Evaluation Manager at Nairobi City Water and Sewerage Company (NCWSC)), Josephine Gakii Gatua (PhD Student, University of Gothenberg), Dr. Moses Ikiara (Managing Director, KenInvest) and Prof. Dale Whittington (University of North Carolina). Mr. Fuente began by explaining that there is a rapid increase in Kenya's population and this trend will continue. However, while rural water access trends are increasing, urban water access trends are decreasing.



The common objectives for water tariffs are to recover costs, economic efficiency where consumers use water efficiently, and for equity and fairness. The common structures used are: a single part tariff (uniform price, increasing block, decreasing block, volume differentiated); multi-part tariff (fixed charge + volume price); and seasonal pricing. The main focus is on equity and fairness, and on increasing the blocks with a view of using a lifeline block to provide water in affordable prices and subsidies through the water tariff. The primary rationale for implementing an IBT are to provide low income household access to water at an affordable price (lifeline block); recover costs from higher volume users in upper blocks; and prevent wasteful or extravagant use with high volumetric prices in upper blocks.

The objective of delivering subsidies through the water tariff is to ensure low income households have access to water at an affordable price, Mr. Fuente said and the assumption is that low income households use less water than high income households. This is why the common policy instrument used is an increasing block tariff with a lifeline block. However, IBTs may not effectively target subsidies to the poor because, to receive a subsidy, households must have a private piped water connection. The assumption that low income households use less water than high income households may also not be correct since lower income households tend to have more members. Income and household size may be inversely related, but shared versus private connections, and re-sale to neighbours exists too. Data requirements also exist for linking water use and income levels. In conclusion, a water tariff should be used to achieve financial and economic objectives, after which tariffs that may work better can be looked for.

#### **Discussions**

The lead discussant for this presentation was Eng. Peter Njaggah of the Water Regulatory Services Board (WASREB). He began by outlining the history of access to water in Kenya beginning with the 1974 slogan "Water for all by the Year 2000". Presently, [Vision 2030](#) is aiming to achieve water for all by the year 2030. He posited that water should be considered as a business like any other. The 2014 National Water Master Plan which provides a guide on tariffs, identifies large financial gaps in which Ksh 800 billion and

Ksh 500 billion is needed for water and sanitation respectively. The current sources of revenue are government taxes, development partners, and tariffs. How far, he queried, should the subsidy apply?

Eng. Njaggah stated that consumers in informal settlements should be brought into existing formal distribution. In Kenya there are multi-dwelling units with joint meters (gated communities/apartments and flats), hence the challenge in implementing IBT which becomes an ineffective way. Feedback from the subsidized households should be used. The average family of five people in formal settlements uses 40 litres per person, which is 6m<sup>3</sup> in 30 days and this should be sufficient for an individual per month.

Other discussion points were also raised by fellow participants. Developing countries face water scarcity, and the World Bank works to increase services to the poor. Tariffs on the lower blocks are political and do not answer questions of the economy, one participant said, and thus access rather than tariffs should be the focus of efforts. A counterpoint was brought up that development banks and consultants bear a big responsibility as they recommended tariff blocks. This was a mistake as they did not understand that the conditions in the developed and developing countries are not the same, hence local factors were not factored in the recommendations. Ten units per month equate to Ksh 187, which is the lowest and almost the same as free water. There is a need to come up with a tariff to generate some income. For example, if in Nairobi there is equitable distribution of water throughout the month, this will increase access and revenue collected.

Due to the low income earners in the slums, a thorough study on tariffs that take cares of both the poor and the rich at the same time should be carried out.

### Water Source Choices in Rural Meru County, Kenya by Prof. Joe Cook (University of Washington)

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Prof. Joe Cook presented the preliminary data for the [Water Sourcing in Rural Kenya](#) project. Other members of that research team are Prof. Peter Kimuyu (University of Nairobi), Josephine Gakii Gatua (PhD Student, University of Gothenberg), Annalise Blum (PhD Student, Tufts University) and Chair of EfD-K Executive Committee) and Prof. Dale Whittington (University of North Carolina).

Prof. Cook begun by describing the study area, which was conducted in Kianjai area, Meru County in Eastern Kenya. He identified the key water sources in the area as; tapped water, private protected boreholes, vended water, public boreholes where water is sold, water from neighbours' boreholes, unprotected shallow wells, and river/rainwater harvesting with households investing in ways to store water.

The research concluded that the key considerations for residents in this area in sourcing for water are waiting and distance, likely conflict when sourcing from the neighbours' borehole, and health risks.

The lead discussant for Prof. Cook's presentation was Patrick Nduati Mwangi of World Bank. He began with the fact that the study is significant in view of the population in the rural areas and the challenges they face in accessing clean water. Choices of rural people have not been a priority in selecting models, and there is a need to look for ways of optimizing the available finances meant for water service provision, he said. However, politicians will seem to be reluctant to price water closer to market rates, yet water is more precious than other commodities. Mr. Mwangi said that Kenya needs to move away from the mindset that water is a public good, hence should be free, and all stakeholders should review pricing of water provision in the country.

Other discussions highlighted the fact that some households use multiple sources of water, for example, for drinking and another for other household use. The large coping costs that the research found (up to Ksh 2000 per month) were deemed to be highly unusual by Prof. Dale Whittington.

#### Way Forward for Water Policy by Nancy Laibuni (Ag.HoD, Productive Division, KIPPRA)



Ms. Laibuni gave a brief talk on water access in Kenya. She highlighted the fact that water is expensive even as it is now recognized by the new constitution as a human right. Appropriate legal and institutional framework has been put in place to enhance water service provision in the country (the Water Act Amendment Bill 2014 is still in process). However, there are policy issues which include devolution of water services, institutional reforms, and resource decentralization. Challenges faced in the sector are policy coherence between National and County Governments, service delivery, infrastructure development and resources management.

The proposed way forward from the workshop was that all stakeholders provide their submissions to the Water Act Amendment Bill 2014; and to consider both costs and benefits to water service providers. In addition, water pricing and water resources should be looked at from the water basin levels and not as per the administrative boundaries.

### Wrap-up and close of event by Prof. Kimuyu

Prof. Kimuyu solicited for issues that the participants would like to see taken forward in water research. Suggestions included: focus on generation of more water for the increasing demand (population); issues on water tariffs and inter-generational concerns; water service provision/infrastructure development financing gaps highlighted in Vision 2030 blueprint (focus on how to fill the financing gaps); and give some inputs on Water Act amendment Bill 2014.

Prof. Kimuyu then took the floor for a vote of thanks. He thanked everyone for coming and for engaging with EfD Kenya at the Policy Day. He urged for more cooperation in order to boost research into water issues in Kenya.



*Participants at EfD-K's Water Policy Day, 2014*