



The Role and Influence of Media in Creating Environmental Awareness in Dar es Salaam, Tanzania

Jackson Simon Lusagalika

Environmental awareness is a prevalent phenomenon in Dar es Salaam City, the eastern part of Tanzania. Dar es Salaam is a major city in Tanzania with a large population (about 6.7 million) and hosts the headquarters of many radio stations, TV stations, and newspaper companies. This essay asks: does the availability of extensive media coverage in Dar es Salaam contribute to environmental awareness to the city's population?. The purpose of this essay is to highlight the role that media has played in creating awareness on environmental issues in the City of Dar es Salaam. This essay uses secondary data and an interview from secondary literature which analyzes different residents' attitudes towards the environment in order to assess the varying levels of environmental awareness related to media houses in Dar es Salaam. Here I use the term 'media house' to refer to producers of digital content that provide digital coverage of news via online articles, radio shows or podcasts, and videos. I have observed that the city of Dar es Salaam is still facing environmental problems due to a limited sense of ownership of public spaces, that means that people disregard environmental conservation initiatives. The majority claim to pay proper media attention and declare they are aware of environmental education through media sources, yet it's very hard for people to take responsibilities in taking major actions to conserve the environment. This essay also demonstrates that social media has been an effective platform for environmentalists and conservationists to reach the residents when addressing specific issues in environmental concern. A recent step by the government of Tanzania, a ban on

the use of plastic bags, has gotten success by the united efforts of the government and media houses due to strict policies formulated by the government which play a major role in reforming residents' behavior in the environment.

Since Environmental education is a major concern which first gained international attention in the 1960s and 1970s through a series of intergovernmental meetings and reports. In the case of Tanzania, the idea of environmental education has been promoted since the 1980s. The government's response to the environmental issues is motivated partly by the country's diminishing natural resources and partly due to global environmental problems such as air and water pollution and global warming (Mtaita, 2007).

Tanzania has suffered environmental problems such as water, air and soil contamination pollution and environmental degradation. Economic development such as urbanization and industrialization, leading to increased industrial waste disposal, household waste and sanitation, are key reasons for this form of environmental problems. The periodic eruption of diseases such as cholera are clear measures of poor environmental management in Tanzania (Mtaita, 2007). The mass media has been known for helping people to access EE, which is extremely important in reducing environmental concerns and their consequences, such as infections and poor water quality. This makes the media an important tool for raising people's environmental awareness (Mhache & Ambosisye, 2017).

The Municipal Council is responsible for waste disposal in Tanzania. It is estimated that 37% of the waste generated is buried, 31% is discarded and 23% is burned away (Nipe fagio Tanzania, 2018). Just 5% of waste is collected on a regular basis, 3% is taken irregularly and 1% is discarded on the roadside. Mismanaged pollution thus continues to overwhelm the waterways and the storm drains (Nipe fagio Tanzania, 2018).

Municipalities in Dar es Salaam contract waste collection activities to community based organizations in low income areas, which

perform the primary collection door to door by means of wheeled pushcarts, and deliver waste to official collection points. In this case the secondary collection (transportation to Pugu dumpsite) is performed by the municipalities. In other middle income areas, the contractors collect with their own trucks and deliver to the dumpsite. Pugu Kinyamwezi is the one of the largest disposal site that was designed as a sanitary landfill and turned into a dump site prior to its inception (Yhdego, 2017).

Solid waste includes all organic and inorganic waste materials that are normally non-free flowing and produced by human and animal activities. They have lost value to the user, and are therefore discarded by the last user as useless or unwanted (Yhdego, 2016). Solid waste management in Tanzania has faced many challenges including inadequate coverage of collection practices and controls, lack of institutional frameworks and communication services, inflexible work schedules and insufficient information on the quantity and composition of waste, as stated by (Kyessi and Mwakalinga 2009; Ogwueleka 2009).

Solid waste in Tanzania is collected in a mixed state and dumped in unplanned areas near human settlements, along the roads, at bus stations, in storm water collection channels, in rivers, etc., posing high risks to citizens due to unpleasant smells, accumulation of flies, blockage of drainage channels, contamination of surface water bodies, and other unwanted phenomena (Yhdego, 2016). This situation was mentioned in articles in East African newspapers as long ago as 1985; the articles referred to Dar es Salaam as a "garbage city" (Sunday News (Tanzania), 2 Nov 1985, p. 5) and a "litter city" (African Events, Nov 1985, pp. 3-5) and to Nairobi as a "city in a mess" (Weekly Review (Kenya), 25 Jan 1985, pp. 2-3) (Henry, et al. 2006). Dar es Salaam has even become worse since the 80s and 90s and in the new century, as solid waste generation has increased in proportion to the tremendous population growth of the city (Oberlin, 2011 and Yhdego, 2016).

Problem statement

There are numerous media sources in the city of Dar es Salaam, which have developed numerous campaigns and projects in response to environmental challenges, but Dar es Salaam is considered to be heavily polluted. Therefore, this essay asks; “does the availability of extensive media coverage in Dar es Salaam contribute to environmental awareness in society?”

Literature review

Knowledge, action and effect are three important characteristics of environmental sustainability. The way people behave is one important element of sustainable development. It is important that people develop a mindset of preserving and valuing the environment. The first step of skill development, the development of personal skills and the acquisition of knowledge is environmental preparation (Boin, 2010). The environmental education program tries to influence human values, behaviors and policies. The idea of environmental sustainability, the management of our natural resources and climate, is a product of environmental awareness education (Comfort, Boin & Demchak 2010). Sustainability refers to development that meets the needs of the present without compromising the ability of future generations to meet their own needs (World Commission on Environment and Development, 1987).

As we address the role of media, we are focused on three key issues: to inform, to educate and to entertain (the original mission of the British Broadcasting Corporation; see Holtz-Bacha, C. and Norris, 2001). The role of the media is very important in influencing public awareness on global climate change. Technologies such as radio, television and the media have played a more important role in increasing people's awareness about climate change and the protection of the environment than many other forms of human com-

munication. People need credible sources of knowledge and information about how to adopt a greener lifestyle. While television is still a very popular source of news, there is increasing number of people going digital for their news (Vandrick, 2011).In addition, printed items, such as book magazines and brochures which helped to pass knowledge, new and up-to-date, while radio and television are main tools for transferring quick information resources due to the wide coverage (Jharotia, 2019).The position of mass media is one of the most important factors driving environmental awareness: only on the condition that first, large numbers of the population have access to these technologies in Dar es salaam, and secondly, that people are interested in ecological knowledge. Mass media is indeed the educational platform for mass education, irrespective of caste, color, or geographic location it proves as an important means for the education to all (Saikia, 2017).

The Study Area and Methodology

The city of Dar es Salaam is among Africa's most polluted cities (Global Residence Index, 2019). The transient population of Dar es salaam leads to insufficient sense of 'ownership' of the city from the people. Poor environmental behaviours can be linked to this lack of 'ownership'. Should we conclude that the requisite environmental management information is not presented by the media? In this study, secondary data from published and unpublished books, journals, magazines, web pages, etc. was collected. In addition, an interview was conducted with an environmental activist and representative of environmental organization in Tanzania.

Tanzania's political, commercial and industrial operation center is the city of Dar es Salaam, covering a gross area of 1397 km² (Dar es Salaam Strategic Plan 2010/2011-2012/2013). With an average air temperature of 26 ° C (Kirama & Mayo 2016), the city faces hot and humid conditions all year round.



Figure 1: Map of Dar es Salaam City Showing the Administrative Districts, Source: Dar es Salaam Socio Economic Region Profile (NBS/RSCD, 2014)

Types of waste that are found in Dar es Salaam

Solid waste generation and disposal

The municipalities of Dar es Salaam produce 3,100 tons / day of solid waste and only 1200 tons / day (39%) of solid waste are processed and disposed of (Kamukala, 2011). According to (Dar Es Salaam Population, 2020) the city's population is now estimated at 6.7 million. This indicates that the population has grown and the amount of solid waste production has inevitably risen. Together with its three municipalities (Kinondoni, Ilala and Temeke) the city council of Dar es Salaam is committed to developing effective strate-

gies for the efficient disposal of solid waste. Nevertheless, in the town of Dar-es-Salaam, mushrooming heaps of uncollected waste spread throughout the region can be seen, and this is because the city council waste collection is not successful in supporting urban residents with health hazards.

Water Pollution

Some settlements such as Vingunguti and Hananasif are situated along the Msimbazi River and divide the region into two parts, north and south, across Dar-es-Salaam from the east to west. The drainage of the river is primarily filled with mangrove swamps. The area is popular in Dar es Salaam due to its role it plays in urban economy. Most of the fresh vegetables sold by street vendors, i.e. spinach, are grown here in Dar-es-Salaam. Also, families who have no access to piped water use Msimbazi River as a household water source. Several industries located along Pugu Road industrial area discharge their waste materials into this basin. The situation is environmentally unacceptable.

Organizations and Campaigns that raise environmental awareness in Dar es salaam.

Dar es salaam as Tanzania's biggest city, and a centre for businesses and the interaction of people from various parts of Tanzania plays an important role in different projects and campaigns which aim to raise environmental awareness in the entire country. Different NGOs, the government and private sectors have initiated and organized projects that enable the people of Dar es Salaam to understand the critical issues that face the environment. The national environmental council (NEMC), various government ministries, and environmental clubs such as the Malihai Club, the WCST (the Tanzanian National Conservation and Communication Strategy 2005–

2009), have also been active, and attempts to transmit environmental knowledge through the internet, radio and television network have also been made.

Moreover, the EE program was introduced into the formal education curriculum following the study review by the Ministry of Education and Culture (MoEC) in 1997. The most recent review of the program (2004/05) covered EE at all levels of education. The policy has contributed to a high level of degree programs in some colleges (Mtaita, 2007). These include environmental engineering and management courses of the University of Dar Es Salaam's (UDSM) natural resources courses, agricultural sciences courses and short-and longer-term courses at the Sokoine University of Agriculture (SUA) and the Open University of Tanzania (OUT).

The following are different campaigns that were initiated in Dar es Salaam for the specific aim of raising awareness and tackling environmental problems facing the entire city.

Nipe Fagio (Let's Do it Tanzania)

Founded in 2013, Nipe Fagio is a civil society organisation. It aims at encouraging individuals (especially young people), civil society, the private sector and the government, to make the Tanzanian economy clean and sustainable, and to be conscious of their roles in waste management and reduction of environmental impacts (in terms of air, water, and soil quality).

Nipe Fagio aims to harness the power of the community to develop solutions to hygiene challenges, health problems, environmental care issues, waste management and the state of recreational areas with the collaboration of government, municipal institutions, trade and civil society groups (Nipe Fagio Tanzania, 2018).

The Let's Do It! Tanzania campaign, organized by Nipe Fagio, brings different sectors and regions together to work in a national

and global movement, based on cooperation, action and technology to address these problems. The campaign focuses on local waste management solutions and climate change adaptation measures that help the reduction of greenhouse gas emissions and provide environmental, social and economic benefits to Tanzania.

Bremen Overseas Research & Development Association (BORDA)

Bremen Overseas Research & Development Association is a German NGO with headquarters in Bremen and a network of local partner organizations in more than 20 countries around the world. BORDA has been involved in the fields of poverty alleviation, sustainable protection of natural resources and the development, implementation and distribution of decentralized sustainable technologies and social initiatives for potable water, treatment of wastewater, provision of energy, and solid waste management, since its establishment in 1977.

Awareness Raising Campaign: Cleanest Neighbour Competition Program in Dar es Salaam a joint collaboration between BORDA and Nipe Fagio

The goal of Community awareness campaigns was to raise awareness of problems and solutions in households regarding environmental and solid waste management by introducing a "Cleanest sub ward competition." The aim of this program was to encourage behavioral changes at the community level in the selected project areas in order to achieve good solid waste management. The initiative involved various measures that gave community leaders guidance and support, including better waste collection systems, and sound solid waste management approaches.

Kinondoni Municipal Council helped to select the location for the project. The project lead initially introduced the awareness raising campaign concept and emphasized the campaign's competition aspect the cleanest sub-ward will be the winner. The project concept was introduced in two wards at eleven sub-wards. Nine sub-wards applied to compete for project hosting in their area. Finally, two sub-wards were selected as project area which is Kibangu and Mwongozo, from Makuburi ward.

The project implementation was led by BORDA and supported by Nipe Fagio with clear roles and responsibilities. Nipe Fagio created awareness through:

1. Coordinating a door-to-door visit campaign where by the total number of beneficiaries was 29,804 people residing in 6,623 households from two sub-wards: Mwongozo (14,194 people from 3,552 households) and Kibangu (15,610 people from 3,071 households) in Makuburi. The aim was to increase knowledge and change attitudes of citizens pertaining to solid waste management at source, including waste separation, contracts with service providers, reducing open burning, littering and the dumping and burying of waste, and increasing recycling.

2. Organizing community clean-up events in drainage ditches, litter pick up around the neighbourhoods etc. This activity encouraged the community to organise monthly clean ups and it became a regular practice by the end of the project period.

3. Establishing a school program. The school program engaged students in workshops, and supported waste and sanitation education knowledge sharing in schools. Thereby students and schools could adopt better waste practices and students shared their knowledge with their families and other community members.

4. Organizing community group exchange visits. The group visits increased know-how, changed attitudes concerning waste, encouraged improved waste management practices and motivated in-

dividuals and groups to keep their environment clean, and to educate others.

Roots & Shoots Tanzania

Jane Goodall's Roots & Shoots operates in more than 130 countries today, but it has a rich history in Tanzania. It was founded in 1991 when Dr. Jane Goodall was approached by a small group of Tanzanian students at her house in Dar es Salaam. Because Dr. Jane expressed her compassion for animals and the environment, they told Dr. Jane what could be done to improve the planet. They decided to set up clubs in each of their schools after a spirited discussion to tackle the relevant issues at the grassroots level. This was Roots & Shoots very first club. Roots & Shoots creates service-oriented programs at elementary schools, high schools, and colleges as a strong international youth organization. Such clubs organize and carry out projects based on the unique interests, expertise and needs of their community. Any or more of the following three topics are discussed by the Roots & Shoots projects; Care and Concern for Animals, Care and Concern for the Human Community and Care and Concern for the Environment (Roots & Shoots Tanzania, 2013).

Findings and Discussion

Media was used as a communication strategy for all of the projects mentioned above to reach the public at the right time. Television stations, newspapers, social networking pages, blogs and radio stations have played their task professionally on their exercise of raising public awareness in Dar es salaam community regarding the projects campaign.

Mhache and Ambosisye, (2017) conducted a survey of 30 people in Dar es Salaam Region, Tanzania, regarding the contribution of

mass media to environmental management. The participants were drawn from men and women, local citizens and professionals from numerous mass media. The interviewees were asked why Dar-es-Salaam is amongst Africa's polluted areas (Table 1). Many factors have been given, among which are large population (70%), the ignorance of local residents (33%), lack of serious city government measures to curb the problem (37%), and poor planning (77%).

Reasons	Frequencies	Percentages
Untimely garbage collection	25	83
Poor planning	23	77
High population	21	70
Poor management of sewage	19	63
Lack of serious measures by the city authorities	11	37
Ignorance	10	33
Lack of effective environmental by laws	7	23
Others (lack of education, fines not instituted)	5	17

Table1: Reasons for Dar es Salaam to be rated a polluted region in Africa. Source: Mhache & Ambosisye, 2017.

In an interview, Mr. Erasto Njavike from Jane Goodall Tanzania was asked the research question of this study "Does the availability of extensive media coverage in Dar es Salaam contribute to environmental awareness in the society". Mr Njavike replied that:

"The media provides us with sufficient coherence when we need to present environmentally friendly related information to the public, but the problem is the sense of ownership that people think of as Dar es Salaam. Dar es Salaam is a commercial city so the majority move to and even from different regions of Tanzania. The problem comes in the personal implementation of what a citizen is supposed to do to the environment, and by that time many of them completely neglects the environment, The main

thing now is to think about how to change people's attitudes towards Dar es Salaam and the environment as a whole" (E. Njavike, personal communication, Aug 15, 2019).

Conclusion and Recommendations

The more projects and efforts which are put into place to deal with environmental challenges, the more people become aware of and can access various sources of environmental information. Many campaigns and environmentalists in Dar es Salaam have continued to urge people to take responsibility for the environment and care for the environment. A large number of people are prepared with that understanding, but the question arises, why is Dar es Salaam still polluted?. It is undeniable that we as human beings are grown up with such habits of thinking about short-term ways of solving our problems and do not consider long-term challenges such as environmental degradation and pollution.

Media has attempted to provide information that has impact on how we should save the environment from the hands of unethical people. In Dar es Salaam, as many people migrate in and out of the city, the majority of them have developed a feeling that they are not at home, and many of them are coming from rural provinces and settle in the city. The feeling they do not 'own' or belong to the city is one that dominates the minds of many residents, but this factor has not been adequately covered by the media. However, we are supposed to raise awareness to turn environmental challenges into every human endeavour here on earth. We can change the perception of sense of ownership through the media and raise awareness on how changes to the environment contribute to climate change. Environmental-related news can be part of the process of making citizens more patriotic, especially when it comes to their own country. And this will contribute to a different feeling than we have been accustomed to for many years. Citizens have grown up with different

perspectives when it comes to solving environmental challenges, to the point where everyone has the responsibility to educate the other when they encounter mistakes from the other. What changes people's attitudes and personal choices towards the environment are other people. Let us all consider what we can do: not by force, but by showing an example.

Based on the conclusion also this study recommends the following.

- i. The Tanzania National Environment Management Council (NEMC) and the Environment Ministry should continue to collaborate with journalists to increase the environmental skills of journalists, thus improving public perception of environmental issues in the media.
- ii. Tanzania NGOs such as Roots & Shoots should provide primary schools with environmental education. The value of the atmosphere and the issues of not keeping the world safe should be explained to pupils and teachers.
- iii. The whole issue of solving environmental challenges should be used as an opportunity for as well as the labor market within it. In this sense, people will rush for employment opportunities in the environmental sector where this will contribute significantly, removing two challenges at once.

References

- Altin, A., Tecer, S., Tecer, L., Altin, S., & Kahraman, B. F. (2014). Environmental Awareness Level of Secondary School Students: A Case Study in Balıkesir (Türkiye). *Procedia - Social and Behavioral Sciences*, 141(0), 1208- 1214.
- Aminatha, K, A.W. Mayo (2016). Challenges and prospects of private sector participation in solid waste management in Dar es Salaam City, Tanzania. *Habitat International*, 53:195-205.
- Anil, K, J. (2018). Role of Media in Enhancement of Environmental Awareness. *Power of Media, Shaping the future, conference*.
- Altin, A., Tecer, S., Tecer, L., Altin, S., & Kahraman, B. F. (2014). Environmental Awareness Level of Secondary School Students: A Case Study in Balıkesir (Türkiye). *Procedia - Social and Behavioral Sciences*, 141(0), 1208- 1214.
- Boin, A., Comfort, L. K., & Demchak, C. C. (2010). *The rise of resilience. Designing resilience: Preparing for extreme events*
- Bremen Overseas Research and Development Association. (n.d.). Retrieved from <https://www.susana.org/en/community/partners/list/details/37>
- Dar es Salaam population (2020). *Demographics, maps, graphs*. (n.d.). *World Population by Country*. <https://worldpopulationreview.com/world-cities/dar-es-sala>
- Emmanuel, P. M., & Bujo, A. (2017). The Contribution of Mass Media on Environmental Management in Dar es Salaam City, Tanzania. *The International Journal Of Humanities & Social Studies*, 5, 281-292.
- Enger, E. and Smith. B. F. 2000. *Environmental Science: A Study of Relationships*. McGraw-Hill, New York.
- Erasto, N. (2019, Aug 15). *Personal Interview Dar es salaam city Profile*. (2015). *Solid waste management*
- Godfrey Kamukala. (2011). *The City of Dar es Salaam striving to resolve environmental problems*. Retrieved from <http://pie.pascalobservatory.org>
- Gayatri Murthy. (2011). *Inter Media. Tanzanian Media Environment Current Access, Potential for Growth and Strategies for Information Dissemination*
- Holtz-Bacha, C. and Norris, P. (2001) "To Entertain, Inform, and Educate": Still the Role of Public Television, *Political Communication*, 18:2, 123-140, DOI: 10.1080/105846001750322943

- Jharotia, A.K. (2018). Role of Media in Enhancement of Environmental Awareness. Retrieved from https://www.researchgate.net/publication/323751233_Role_of_Media_in_Enhancement_of_Environmental_Awareness
- Jane Goodall institute Tanzania. (2013). Meet our Team. Retrieved from <http://rootsandshootstz.org/meet-our-team/>
- Karatekin, K. (2014). Social Studies Pre-service Teachers' Awareness of Solid Waste and Recycling. *Procedia - Social and Behavioral Sciences*, 116(0), 1797-1801
- Kyessi, A. and Mwakalinga, V. 2009. GIS Application in coordinating solid waste collection: the case of Sinza neighbourhood in Kinondoni Municipality, Dar Es Salaam City, Tanzania. https://www.fig.net/resources/proceedings/fig_proceedings/fig2009/papers/ts04b/ts04b_kyessi_mwakalinga_3219.pdf
- Mtaita U. Y. (2007). Stakeholders' Perception of their Participation in Environmental Education in Tanzania. A Thesis Submitted to the University of Waikato in Partial Fulfillment for a Master of Education (MEd).
- Mike Yhdego. (2017). Transforming Dar es salaam into a zero waste city. solid waste management, ESIA and sisal wastes
- Saikia, R. (2017). Role of mass media in creating environmental awareness. *National Journal of Multidisciplinary research and Development*. 2, 01-04.
- rootsandshootstz.org. (2013). Retrieved May 16, 2020, from <http://rootsandshootstz.org/>
- Tanzania national environmental education and communication strategy 2005 –2009.
- Vandrick, Jessica, "The Internet's Influence on Environmental Awareness" (2011). College of Communication Master of Arts Theses. 12. <https://via.library.depaul.edu/cmmt/12>
- World Population Prospects - Population Division - United Nations. (2017). Retrieved 2020, from <https://population.un.org/wpp/Publications/>
- World's most and least polluted cities. (2019, August 29). Global Residence Index. <https://globalresidenceindex.com/world-most-least-polluted-cities/>.