



Review

## ERADICATING MARINE DEBRIS IN BAYELSA STATE: THE ROLE OF LANGUAGE EDUCATION

Teibowei and Marie Therese

Institute of Foreign Languages and Biomedical Translations (IFL-BT) Bayelsa State Medical University, Yenagoa Bayelsa State

### ARTICLE INFO

#### Article History:

Received 13<sup>th</sup> September, 2022

Received in revised form 21<sup>st</sup> September, 2022

Accepted 16<sup>th</sup> October, 2022

Published online 28<sup>th</sup> October, 2022

#### Key words:

Language, Education, Sustainable, Marine Debris, Exploring

### ABSTRACT

Generally, one can authoritatively, assert that, the ocean is critical to life on earth, hence, it is almost impossible to overemphasize its usefulness. This study explored the role of language education in eradicating marine debris in Bayelsa State. The concept of language and language education, sustainable and marine debris were clarified. Factors militating against the eradication of marine debris and language education and creating awareness were discussed. It was recommended amongst others that the government should inculcate the services of language experts for effective eradication of marine debris.

Copyright©2022 **Teibowei and Marie Therese.**, This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

### INTRODUCTION

The ocean is one of Earth's most valuable natural resources. It provides food in the form of fish and shellfish, with about 200 billion pounds caught each year. (Ateme,2021). It serves as the major means of transportation for both passengers and luggage shipping in the state and it provides treasured source of recreation for humans. It is a platform that accommodates minerals (salt, sand, gravel, copper, nickel, iron, cobalt, etc.) and crude oil deposit. Obviously, the marine environment plays a critical role in controlling carbon (II) oxide elimination and oxygen production. Medically speaking, the ocean regulates the earth's climate and serves as a major source of important biomedical organisms which has enormous potential to fight diseases. Generally, one can authoritatively, assert that, the ocean is critical to life on earth, hence, it is almost impossible to overemphasize its usefulness.

In the recognition of the usefulness of the ocean to human existence and the subsequent actions taken by well-meaning world citizens to save it from destruction, Nigeria as a nation embraced a handful of global protocols such as Glolitters Partnership Project, etc. and was labelled the first Lead Partnering Country (LPC) in Africa. All these initiatives and projects are primarily aimed at reducing the effect of plastic litters and other marine debris. Nigeria by default is a maritime state, which has 9 out of the 36 states along the coastline in the Atlantic Ocean. Bayelsa State being one of the states in the coastline has not done much in the fight against marine debris.

Marine debris, also known as marine litter, is human-created waste that has deliberately or accidentally been released in a sea or ocean. Floating oceanic debris tends to accumulate at the center of gyres and on coastlines, frequently washing aground, when it is known as beach litter or tide wrack. Deliberate disposal of wastes at sea is called ocean dumping. Naturally occurring debris, such as driftwood and drift seeds, are also present. With the increasing use of plastic, human influence has become an issue as many types of (petrochemical) plastics do not biodegrade quickly, as would natural or organic materials. The largest single type of plastic pollution (~10 %) and majority of large plastic in the oceans is discarded and lost nets from the fishing industry. Waterborne plastic poses a serious threat to fish, seabirds, marine reptiles, and marine mammals, as well as to boats and coasts.

Dumping, container spillages, litter washed into storm drains and waterways and wind-blown landfill waste all contribute to this problem. This increased water pollution has caused serious negative effects such as discarded fishing nets capturing animals, concentration of plastic debris in massive marine garbage patches, and increasing concentrations of contaminants in the food chain.

In efforts to prevent and mediate marine debris and pollutants, laws and policies have been adopted internationally, with the UN including reduced marine pollution in Sustainable Development Goal 14 "Life Below Water". Depending on relevance to the issues and various levels of contribution, some countries have introduced more specified protection policies. Moreover, some non-profits, NGOs, and government organizations are developing programs to collect and remove

\*Corresponding author: **Dr. Teibowei**

Institute of foreign languages and biomedical translations (IFL-BT) Bayelsa state medical university, Yenagoa bayelsa state

plastics from the ocean. However, in 2017 the UN estimated that by 2050 there will be more plastic than fish in the oceans if substantial measures are not taken.

Ateme, (2021) identified lack of awareness as a major barrier in the fight against marine debris in Nigeria. Language education on the other hand is a branch of linguistics designed to equip learners with adequate knowledge of communicative situations. Since the lack of awareness is a major barrier in the fight against marine debris in Nigeria, and language education on the other hand can produce effective communicative platform needed to improve the awareness of citizens, then there is need for effective collaboration between language education and task of fighting marine debris in Bayelsa State. Hence, this study explored how language education can sustain the fight against marine debris in Bayelsa, Nigeria.

## **CONCEPTUAL CLARIFICATION**

### ***Language and Language Education***

Language is one of the attributes of humans. It is a medium through which Ideas opinions and feelings are expressed. It is indispensable in the co-existence of humans. Anogbou and Mba (2010), in offor (2014) defined language as a means which human beings have devised for communicating ideas, feelings, emotions, desires, etc, through complex vocal and written sounds.

Language education is an aspect of education which is aimed at bringing the learner to a level of proficiency in the use of language, so that when he/she listens or speaks, reads or writes it will reflect the totality of culture it represents. Idu and Obam (2021) posits that language education is designed to equip the learner with adequate knowledge and practical skills. It is also a process and practice of acquiring a second foreign language. It is a branch of applied linguistics and is considered an interdisciplinary field. This implies that it can be useful to any field of human endeavor of which medical science is a part.

### ***Marine Debris in Bayelsa State***

To discuss the role of Bayelsa Medical University in curbing the effect of marine debris, it is important that this audience is briefed on the nature of marine debris available in the terrain, their sources and the specific impact they have on the ecosystem.

Bayelsa state being one of the 9 states in Nigeria along the Coastline of the Atlantic Ocean has mainly plastic litters, Abandoned, Lost or other Fishing Gears (ALDFG) and crude oil as the major sources of marine pollution.

Plastic litters takes the form of plastic bag and other single-use plastic products such as take-away food packs, straws, cups, spoons, bottles, sachet bags, etc. Once discarded, they are weathered and eroded into very small fragments which clung as deposit in beaches. Akankali (2015) reported that these plastic debris cause deaths of more than a million seabirds every year, as well as more than 100,000 marine mammals. Plastics and other litters hamper access to exploit fish resources.

### ***Abandoned, Lost or other Fishing Gears (ALFG)***

is another major source of marine pollution in Bayelsa State. In simple terms, they are gears, spears, leads, etc. that have

been abandoned or lost in the ocean. Vessels or fishing gadgets such as spears & gears abandoned in the marine environment has the potential to degrade the environment severely. It constantly catches, threatened and endangered species, thereby further worsening the biodiversity depletion in species of both biological and economic importance from coastal waters. Most ALDFG's physically impacts the benthic environment by obstruction of their natural locomotive pattern and trapping them in such a way that makes them easy prey to their predators. It can lead to formation of completely alien colony in ecology, thereby leading to wiping out of endemic/endangered species.

### ***The crude oil***

Waste which comes in the form of effluent or gas flaring affects the marine environment adversely. Rampant discharge of hot effluents into our coastal aquatic environment is quite common off the coasts of Lagos and major industrialized cities of the Niger Delta Region. Also flaring of associated gas especially at the flare pits are a severe source of thermal pollution in the coastal environment of Nigeria. Within the Niger Delta region, there are so many flare pits. The scorching heat from such flare sites destroy wildlife over a considerable radius of the areas around and drastically distorts natural the population density of nocturnal animals through constant illumination of the forest.

Studies by Ateme (2021) and Dunbili (2021) reported that the major causes of these afore mentioned state of the marine environment are lack of awareness, values and poor waste management infrastructures.

### ***Factors militating the eradication of marine debris in Bayelsa State***

Sustained solutions to the problem of plastics pollution (and waste management) in Nigeria require political and social will (Yanful, 2009). Currently, there is little evidence of this despite the issue being raised in relation to Nigeria before Kenya introduced a total ban on plastic bags in 2017. To date, no serious action has been taken in this regard by the Nigerian governments and policymakers (Jambeck, 2018). Nigeria could follow the example of Kenya and other African and Western countries in regulating plastic products. Countries like

South Africa, Rwanda, Somalia, Eritrea, Tanzania, and Uganda have either banned plastic bags or introduced levies/taxes on them, with the aim of solving the problem of marine- and land-based plastic pollution. Charges or levies/taxes on single-use plastic bags appear to have been effective in reducing plastic consumption in countries like Wales and Portugal. The Nigerian government should enact similar regulations on the use of single-carrier shopping bags. Another advantage of introducing a payment for plastic bags is that such policies "may catalyze wider awareness of plastic waste and lead to 'policy spillover,' i.e., greater support for other waste reduction policies" (Jambeck, 2018).

For this measure to be effective, government and industry would need to collaborate to facilitate the provision of sustainable alternatives, while supermarkets/retailers could introduce financial incentives to encourage reuse. European Union Member States reached a provisional agreement on January 18, 2019 to restrict the single-use of plastic products

such as straws, plates, spoons, etc., by 2021, with the aim of overcoming the problem of plastic pollution. Such a timeline may be considered during the legislative process in Nigeria.

In regard to the use of plastic water sachets, culturally specific strategies to reduce sachet litter must be developed in the country. This is vitally important because as (SAPEA, 2018) revealed, a one-size-fits-all approach to plastic pollution will not be effective. As Ezeokpube et al. (2012) suggest policymakers could introduce interventions to encourage plastic sachet buyback (buyback pack) from users. This measure would facilitate reuse and reduce the indiscriminate disposal of used plastic sachets. The country could also adopt refillable sachet water packaging instead of the extant single-use sachets. To this end, the government and other stakeholders should subsidize or fund the initiative.

At the same time, it is paramount to note that any interventions or control should consider the health risks that could result from a water shortage, which may emerge if plastic sachets were to become unavailable through aggressive control. In order to avoid creating unintended consequences that could have a deleterious effect on communities, there must be sustainable alternatives in place for these suggested regulations to succeed. Again, Wagner-Lawlor (2017) suggested that artists in Nigeria could utilize plastic waste for their artistic works. These measures could reduce the reckless disposal of plastic sachet bags/products and the burden of uncollected plastic debris that exacerbates plastic (landfill and marine) pollution in Nigeria.

Changes in behavior are key to solving the problem of land-based and marine pollution in Nigeria. This is important because the emission of plastics into human and aquatic habitats is largely engendered by human decisions and actions/behavior. Programs targeted at behavior change yield expeditious environmental advantages. Although targeting a shift in behavior is important, there is also a need to prioritize how to identify the main social practices that significantly contribute to plastic emissions and pollution and the factors that determine them. For example, not every consumer who purchases a bag of sachet water will dispose of it indiscriminately; exploring why certain individuals have prosocial behaviors is a key route to understanding how best to create interventions that will be effective. Future sociologically informed research that addresses plastic consumption within communities; the role of social networks; and how these might be mobilized to develop more prosocial behavior are also likely to yield valuable insights.

### ***Language Education and Creating Awareness***

An essential step designed to reduce marine litters should be an evidence-based education that will create awareness of the dangers of plastic pollution among indigenes of Bayelsa. Reports from Creel (2021) revealed that, this measure has facilitated the reduction of debris in the marine environment in Rwanda and other African countries. Designing evidence-based educational or interactive programs that can help create awareness of the problem of plastic pollution and the collective responsibility for solving it should be encouraged. Creating awareness would trigger more extensive public/societal engagement with plastic pollution and how it may be addressed collectively. This is evidenced in a study conducted in Europe, where educators and students were

empowered in regard to how to engage with plastic litter to solve the problem through an online training course and educational video competition on marine debris (Hartley, 2018). At the end of the course,

*Educators felt more able and confident to include marine litter in their*

*Teaching while students felt more concerned about marine litter, had a better*

*Understanding of the issue, causes and impacts, and reported performing*

*More waste-reduction behaviors [Hartley, 2018, p.227].*

Language education also, has a role of featuring traditional and social dimensions in creating significant awareness and education strategies. This would help communities to understand the magnitude of the problem, how their actions contribute to it (SAPEA, 2019), and how they may participate in solving it while also challenging barriers to change.

Creating cultural norms around the recycling of plastic waste would not only reduce the number of plastics reaching the marine ecosystem but would also reduce plastic pollution on land. Therefore, there is an urgent need to finance and/or build infrastructure that will aid waste

collection and the recycling, repurposing, and reusing of plastics (Jambeck, 2018), in Nigeria. Top-down solutions do not work—we need to unpack the culturally specific ways we engage with plastic pollution as communities.

## **CONCLUSION**

The study has shown that language education is a lead component for effective public awareness in Bayelsa State, if the fight against marine debris must be victorious. This implies that incorporating language education content into the programme of environmental education will sustain the intent of Sustainable Development Goal 14 "Life Below Water". With this position, the following suggestions are given:

- i. The services of language expert should be inculcated into the fight against marine debris for effective service delivery.
- ii. Adopting Marine Debris Education in a non-formal setting
- iii. To be effective the non-formal education programmes will be launched on social media and systematic ways of evaluating its progress/outcome will be instituted.
- iv. Funding of Centre for Medical Waste Management
- v. Funding in the form of grants for research fellowship and post-doctoral fellowship in this area will give birth to ideas that will address the issue. We use this medium to call on able and interested NGO(s), and other corporate bodies to partner with us.

## **References**

Akankali, A., (2015). The Effects of Marine Pollution on Nigerian Coastal Resources. *Journal of Sustainable Development Studies*. 8(1); 209-224

- Ateme, M. E., (2021). Developing marine and coastal resources in Nigeria: Prospects and challenges. *Maritime Technology and Research*; 3(4): 335-347
- Ajibola, B.C (2020). Creativity in language teaching as tools for repositioning entrepreneurship in Nigeria. *Academic Scholarship Journal*, 17(1), 53-60.
- Akissani, E. O. (2019). The challenges of realizing Nigerians Vision 20:20:20 Paper presented at the Annual Convention of the Government College, Ughelli, Old boys association in north America. Retrieved 15th march, 2020 from [www.goggle.com](http://www.goggle.com)
- Amuta, F. O. (2019). English language and qualitative leadership: A panacea for sustainable development in Nigeria. *IMTIJOIAs*. 3(2):28-37
- Ellison, D., (2015).Communication skills. *Nurs Clin North Am* 50:45–57.
- Foronda C, Mac-Williams B, McArthur E. (2016). Interprofessional communication in healthcare: An integrative review. *Nurse Educ Pract* 19:36–40.
- Kondo, J., Rie, T., Tetsuya J., & Kei, K., (2020). Developing an interpersonal communication skill scale targeting female nursing students. *BMC Res Notes*; 13(43) <https://doi.org/10.1186/s13104-020-4896-6>
- Maguire, P., Pitceathly, C., (2020). Key communication skills and how to acquire them. *BMJ* 325:697–700.
- Manojlovich, M., (2010). Nurse/physician communication through a sensemaking lens: shifting the paradigm to improve patient safety. *Med Care* 48:941–6.
- Panczyk, M., Iwanow, L., & Zarzeka A, (2019). Communication skills attitude scale: a translation and validation study in a sample of registered nurses in Poland. *BMJ Open*. doi:10.1136/bmjopen-2018-028691
- The National Centre for Advancing Translational Science (NCAIS, n d).
- United Nations World Commission (1992).
- Wehling, M. (2006). Translation medicine. Can it really facilitate the transition of research “from bench to bedside”? *European Journal of clinical pharmacology*, 62: 91-95
- Yanful, M. M, (2009). Comparison ofmunicipal solid waste management systems in Canada and Ghana: a case study ofthe cities of London, Ontario, and Kumasi, Ghana, *Waste Manag* 29 (10)2779–2786.References

**How to cite this article:**

Teibowei and Marie Therese (2022)' Eradicating marine debris in bayelsa state: the role of language education ', *International Journal of Current Advanced Research*, 11(10), pp.1635-1638 DOI: <http://dx.doi.org/10.24327/ijcar.2022.1638.0365>

\*\*\*\*\*