

A PUBLIC AQUARIUM TO REVITALIZE TINAPA AND HELP PROTECT AQUATIC LIVES IN NIGERIA

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ABSTRACT

It is widely accepted that Tinapa projects are in crisis. They face a barrage of daily threats including facilities degradation, lack of federal government policy to support the free trade zone, high maintenance cost and underutilization of existing infrastructures. While Tinapa need crowd to function, the coastal line is overcrowded and the strain on Nigeria waters is conspicuous. They face the treats of overfishing, habitat degradation, increased runoff and septic discharge from coast settlements. This paper will show that with the development of a public aquarium , with programs instituting and implementing conservation solution that will stimulate public involvement, we can provide the crowd Tinapa needs to function and at the same time create public awareness to the protection and conservation of marine species and the environment. With the case study of some aquariums that have contributed to the economic revival and growth of the localities they are built, this study will evaluate challenges and opportunities associated with the development and expansion of aquarium programs to promote personal and civic oriented activity that will revive Tinapaand protect aquatic resources.

INTRODUCTION

Every successful city, particularly those that emerge as tourist destinations, can boast at least one amenity or neighborhood that other

cities simply cannot replicate, in Nigeria it supposed to be TINAPA or “The Project” as it is called, a multibillion naira development situated within the Tinapa Free Zone and Resorts (TFZR), a promised tax free zone that never took-off, adjacent to Calabar Port and the Calabar free trade zone (CFTZ). With a center-piece of 65000 sqm of warehousing and wholesaling facilities, retails outlets developed for importers and exporters using the Calabar port to target west-Africa sub-region as a consumer base. Tinapa Business Resort Limited (TBRL) a Public limited liability, acts as the project vehicle to provide key services to keep the tenancy running. Tinapa was to be managed by Tinapa Business Resort Free Zone Company (TBRFZC) a subsidiary of Tinapa Business Resort Limited (TBRL) in conjunction with world-class professional firms such as BROLL. The financial viability of Tinapa were to be driven primarily by imports-exports and trading activities in addition to services offered by the leisure and tourism department of the project.

The initial concept was to make that area of cross river state a destination of choice to tourists from the sub-region of south Saharan Africa, a kind of Dubai of Africa. But for some very predictable reasons, it did not live up to its expectations-the absence of a clearly spelled-out federal Government policies to back-up the core idea of tax free zone, the relieve of all custom duties on importations of goods destined to the free zone. In the absence of such policies the area could not pull the kind of crowd necessary for its survival. The promise of lower costs and higher profits did not meet any government supports in that direction so Tinapa as it is could not deliver on this promise. When we take a look at some of the many elements that constitute the advantage Tinapa engorges, the package of business incentives too good to miss, and the

Business Resorts and world-class integrated business and leisure resort, with adequate infrastructural developments like – the 14 kilometres monorail project already started, also included are telephone line, water system, fibre-optic cable system and other utility lines worthy of any developed city’, it is urgent that something needs to be done. The Niger Delta Basin, the third largest drainage basin in Africa; and the estuaries of the Imo, Qua Iboe and Cross Rivers in the eastern coast are great tourism potentials for Nigeria. But they are marked as pollution “hot spots” in the Nigeria coastline. The beaches with rolling dark stone hills as their backdrop provides a picturesque setting for a tourist spot. The demand for shark fins, crocodile skin and meats and other aquatic rare species have endangered many aquatic wildlife both in saltwater and freshwater. “A state of the art” Public Aquarium will pull the crowd necessary to revive Tinapa and help to create awareness and public participation through education , entertainment and conservation programs that will spark the need to protect and preserve aquatic wildlife. It will renew interest that was waning in a zone of the beach that had fallen into neglect and become a destination of choice for tourists.

DISCUSSION

The construction of the National Aquarium in Baltimore’s inner Harbor has proven to be a crowd pulling facility the economic impact can be quantify and analytical findings can be summarized to show how public aquariums draw crowd and improve the economy of an area.

It is important to note that while the Aquarium sustains an iconic structure in Baltimore City, it is an amenity for the entire region. Through August 2012, almost 170,000 visitors from other Maryland locales (approximately 15 percent of total visitation) visited the

Aquarium. More of these visitors resided in Baltimore County (131,363) than in any other local jurisdiction. This means that the Aquarium's ability to educate and sensitize people to environmental and other issues, including young people, penetrates deep into the suburbs. The Washington, DC location has been at its current address since 1932 and has worked in collaboration with the signature Baltimore location since 2003. Following a five-year renovation effort, the Washington facility was "re-introduced" to the public in 2008 and now features a "45-minute showcase of more than 250 unique and engaging species including alligators, piranha, shark, eel, gar, and adorable loggerhead turtles." The location hosts more than 200,000 visitors each year. It should be noted that despite its name and location, the Washington, DC site receives no federal operating support. through their operations and ongoing capital investments, the National Aquarium produces significant economic and fiscal impacts in both communities. This study separately assesses the impact of the two locations and uses as its source material operational expenditures and visitor spending data. Importantly, the study team specifically analysed the spending of visitors who have stated that their primary reason for visiting Baltimore's Inner Harbor or Washington, DC was to patronize a National Aquarium facility. As a result, visitor spending that takes place within the walls of the facilities and in the general vicinity can be reasonably attributed to the existence and functioning of these two facilities. From a geographic perspective, economic and fiscal impacts are separately quantified for the City of Baltimore, the State of Maryland, and the District of Columbia. What is not quantified are some of the spinoff effects that can be fairly attributed to the National Aquarium, including the impact the Aquarium has had in

underpinning the renaissance of Baltimore’s gleaming waterfront—a waterfront that has attracted global attention and is now viewed by many urban planners as a model for other cities.

The summary of the study includes major statistical findings, key analyses, and the following essential economic indicators about the National Aquarium’s effect:

- \$319.6 million in annual economic impact
- 3,347 jobs created
- \$11.7million annual tax revenues to the State of Maryland
- \$5.9 million annual tax revenues to the City of Baltimore
- 1.5 million annual visitors

Public opinion polling over the last several decades has shown that there is minimal public awareness concerning environmental or marine conservation issues. For example, in 1998, the National Environmental Education and Training Foundation (“NEETF”) commissioned the market research firm Roper Starch Worldwide to assess what Americans know about the environment. The overarching conclusion was that Americans have a very low knowledge of, but also a high concern for, environmental issues.

In a 2003 study of 2,400 adults, the American Association for the Advancement of Science (AAAS) found that almost 80% of Americans felt that “man-made stresses are endangering coastal regions and oceans and this may lead to long-term damage and serious problems.” However, only 31% of adults thought that their personal actions would have an influence on the health of the ocean. More recently, during the 3rd and 4th quarters of 2008, the MBA, in collaboration with the Ocean Project and the National Aquarium in Baltimore, conducted a

major public opinion survey to assess “the extent to which Americans know about, care about, and value the ocean.”

Over the course of four months, the researchers used online collection methods controlled with intercepts and random digit dialling to survey 22,000 people across the United States. The results, published in the report *America, the Ocean, and Climate Change*, were not reassuring. When asked about the three most important current issues confronting the United States, most Americans were concerned with the economy (40.2%), national security (14.5%) and energy independence (10.9%). Only 3.6% of respondents included climate change and only 2.4% of respondents included protecting the environment. According to the report, this illustrates that the “environment does not rank as a ‘top-of-mind’ concern to the public.” Compared to other environmental challenges, ocean conservation ranks at the bottom of the list behind climate change, sustainable energy and air pollution among other issues. The study concluded that “the public is largely uninformed about contemporary ocean issues, and is not able to ascribe any sense of proportional risk to specific threats.” Overall, the report illustrates that there is currently only a small U.S. public constituency for marine conservation.

The Ocean offers fantastic learning opportunities that cannot be denied. *“Every time you dive, you hope you’ll see something new – some new species. Sometimes the ocean gives you a gift, sometimes it doesn’t.” – James Cameron*

Many documentaries and fiction films take us to the bottom of the ocean or to a walk through rainforest, where we encounter aquatic

lives that remind us that there are hidden worlds in the ocean and in the forest that need our attention. When you watch aquatic animals in the mimic environment, the emotion, the feeling and the appreciation is different compare to watching animals in a zoo or safari. In the aquarium, the soundtrack with its mellow rhythm, the view pattern and the uniquely shaped exhibits spark our imagination and create a bond with these exhibits that will remain with us for the rest of our lives.

Public aquaria attract a large number of domestic and international visitors. There are several factors that keep the public popularity of aquaria high. Many people nowadays live in cities and the natural environment is not within their daily routines and experiences (Wetzel and O'Brien, 1995). Aquatic organisms cannot be observed regularly as aquatic environment is not accessible to people. Individuals, families and social groups are visitors of aquaria. The aquarium exhibits habitat replications, integrated film and video programs enhance the educational value of public aquaria. The animal visitors see within a public aquarium are “ambassadors” of the natural world (Taylor, 1995). This way aquaria shift from recreational centers to informal educational centers. Interaction panels, posters and web facilities can act as interactive interfaces and promote both interest and learning (Lin, 2007). A study was conducted at the National Aquarium in Baltimore (NAIB) to assess visitor’s experience to conservation (Adelman et al., 2000). The study provided evidence that visitor’s attitude was affected in the short term. Enthusiasm and emotional commitment to conservation returned to the original levels. These results indicate that a more integrated policy is needed for the visitors to be conservation oriented and participate in conservation actions. On

the other hand, Monterey Bay Aquarium (MBA), tried to assess visitor's interests towards conservation as MBA major mission was to inspire visitors to the conservation of the oceans (Yalowitz, 2004). It was found that most visitors responded positively to conservation. If we take into account that large aquaria handle millions of visitors per year, it is obvious how crucial they can be in conservation and non-formal education.

Over the last three decades public aquaria are blossoming all over the world. New aquaria are built with modern concept and design; many old aquaria have been renovated. Four reasons have been reported that make construction and operation of aquaria feasible (Wetzel and O'Brien, 1995): (a) Construction and operation costs can be accurately accessed (b) they have limited requirements for space and therefore they can be built in urban areas with many potential visitors and academic opportunities (c) they are still popular as recreation centers and (d) they can enliven declining waterfront areas and (e) widening of the missions of the aquaria to include recreation, education, conservation, research and social benefits. These missions also help funding of the aquaria through research, conservation and educational projects, promote collaboration between aquaria and Academic Institutions and improve staff quality. Book publications and film productions on aquatic and marine life enhance the relationships between visitors and aquaria; the contribution of aquaria to change people's attitudes towards nature can be the target for this century. Therefore, it is actively encouraged that aquariums participate in aquatic research in Nigeria. One of the most difficult issues in studying

nature is the task of separating anthropogenic variability from intrinsic or natural variability in ecosystem, especially in coastal zone.

CONCLUSION

Despite the difficulties of finance, space and maintenance involved, Aquaria design and construction industry serve as a source of employment and revenue to both the government of different countries and individuals/teams occupying this niche. Tinapa has adequate infrastructures businesses and entertainment facilities. A Public aquarium will provide the crowd it needs for its full function. It will offer an environment within which man and aquatic species are in a symbiotic relation; where man is entertained and educated and the marine specie protected and conserved.

REFERENCES

1. Adamson, M.W. (2004) Food in medieval times. Food through history. Westport, Conn, Greenwood Press, pg. 42.
2. 1996. Aquarium Fish Magazine, 8 (9-11), pg. 49.
3. Aquarium, Wikipedia.
4. Association of Zoos & Aquariums, the guide to accreditation of Zoological parks and aquariums(2018 edition)
5. Delbeek, J.C. & Sprung, J. (2005) The reef aquarium science, art et technology. Coconut Grove (Florida), Ricordea Publishing.
6. E. Gobo and T. K. S. Abam. (2002 ECOSERVE PUBLISHERS, CALABAR)Institute of Geosciences and Space Technology, Rivers State University of Science and Technology, P.M. B. 5080, Port Harcourt, Nigeria.

7. Eja, Eja. I., Effiom, Violet Asuquo (Journal of Environment and Earth Science) www.iiste.org ISSN 2224-3216 (Paper) ISSN 2225-0948 (Online) Vol.4, No.2, 2014 Department of Environmental Science, University of Calabar-Nigeria. Email: ejaiwara43@gmail.com, violeteffiom@yahoo.com
8. Helfman, G.S. (2007) Fish conservation: a guide to understanding and restoring global aquatic biodiversity and fishery resources. Washington, Island Press.
9. Hemdal, J.F. (2003) Aquarium fish breeding. Hauppauge, N.Y. Barron's, pg. 8.
10. Hibberd, S. (2017). The Aquarium and Water-Cabinet. Nikosia, TP Verone Publishing.
11. <https://www.hindawi.com/journals/ijfr/2012/469326/>
12. <https://www.vanguardngr.com/2016/08/buhari-to-inauguratr-multi-billion-naire-calabar-monorail/>
13. <https://www.vanguardngr.com/2017/12/criver-signs-mou-firm-tinapa-lakeside-hotel-upgrade-obudu-ranch-resort/>
14. Kisling, 2000
15. Ramsey/ sleeper, architectural graphic standards eleven edition the american institute of architects, p 832
16. Ricardo Calado, Ike Olivotto, Miquel Planas Oliver, & Joan Holt (eds.) (2017) Marine ornamental species aquaculture. Chichester, West Sussex, UK, Wiley-Blackwell, pg. 4.

17. Sea friends Aquariums
describing the Sea friends marine aquariums
By Dr J Floor Anthoni (2005)
18. (Times Saver Standard for Building Types p 678). Authors:
Glenn Arbonies, AIA and Sandra Vlock, AIA Arbonies King Vlock
Architects.
19. Usoro E. (2010) Nigeria. In: Bird E.C.F. (eds)
Encyclopaedia of the World's Coastal Landforms. Springer,
Dordrecht
20. Vernon N. Kisling (ed.) (2001) Zoo and aquarium history:
ancient animal collections to zoological gardens. Boca Raton, Fla,
CRC Press.
21. Ways to study and Research Urban Architectural, and
Technical Design by Theo van der Voordt and Hermn Van
Wegen (DUP Science, 2002).

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