



**SEA LEVEL RISE, FORCED MIGRATION, AND HUMAN SECURITY IN COASTAL COMMUNITIES IN THE NIGER DELTA REGION, NIGERIA. A STUDY OF ITAK ABASI COASTAL COMMUNITY, IBENO LOCAL GOVERNMENT AREA, AKWA IBOM STATE**

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**ABSTRACT:** *Sea level rise occasioned by climate change has been considered as a major threat among the coastal communities in the Niger Delta region, Nigeria. The effects of sea-level rise on human security include the displacement and vulnerability of the inhabitants. The study aims to examine its socioeconomic effects on the inhabitants in their new settlements. The study adopted the Trauma Theory in explaining the effects of forced migration on Itak Abasi inhabitants. The triangulation method of data-gathering techniques was adopted in this study. The primary data used are collected from the structured questionnaire and unstructured interview. The study adopted a descriptive statistical analysis using charts. The study unravelled that Itak Abasi inhabitants faced lots of challenges such as loss of family bonds, health challenges, loss of jobs, properties, among others. The study recommends amongst others that the Niger Delta Development Commission should fast-track the completion of the rivers bank project in Itak Abasi to protect the remaining island from been eroded by the flood.*

**KEYWORDS:** Community, Displacement, Sea Level Rise, Settlement, Trauma.

## **INTRODUCTION**

The sea-level change phenomenon is a significant effect of climate change in our environment and societies. The global sea-level rise rose in the 20<sup>th</sup> century and is expected to intensify and accelerate due to an increase in the anthropogenic activities in the 21<sup>st</sup> century. “The estimated rate of sea-level rise from anthropogenic climate change from 1910 to 1990 (from modeling studies of thermal expansion, glaciers, and ice sheets) ranges from 0.3 to 0.8 mm/yr. The 20<sup>th</sup> century warming has contributed significantly to the observed sea-level rise, through thermal expansion of seawater and widespread loss of land ice” (Church, et al, 2001, p.641).

The sea-level rise adversely impacts on coastal communities globally. It leads to deaths and destruction of properties. As a result, the inhabitants are forced into migration without adequate preparation. Since the dawn of the 21<sup>st</sup> century, the degree of sea-level rise has become rampant among the coastal communities in the Niger Delta Region, Nigeria.

For instance, in 2012, most communities along coastal areas experience sea-level rise that led to displacement Nigeria witnessed erosion and flooding. Relief web (2012) disclosed that the 2012 rainy season in Nigeria has been worse than earlier years, and heavy rains at the end of August and become serious in early September leading to flooding in various parts of the



country. However, the Nigerian authorities were able to contain the initial overflow, but was unable later because the water reservoirs have overflowed and authorities were obliged to open dams which pressured in Nigerian neighbouring countries (Cameroon and Niger), leading to destroyed river banks and infrastructure, loss of property and livestock and flash floods in many areas.”

The consequences of 2010, 2012, and 2018 were unimaginable on human security in those affected areas in Nigeria. Human security is people’s centred security, which ensures individual protection from socioeconomic and political challenging including environmental degradation leading to climate change. Nicholls (2003, p.6) revealed that:

Global-mean sea-level rise occurred through the 20th Century, and continued rise is one of the more certain impacts of global warming. This is resulting in a range of impacts including increased flood risk and submergence, salinization of surface and ground waters, and morphological change, such as erosion and wetland loss.

The adverse impact of sea-level rise in Nigeria, particularly in coastal areas in Niger Delta in 2010, 2012, and 2018 were unimaginable. Several coastal communities were flooded and submerged leading to death and destruction of properties. The International Federation of Red Cross (2012) revealed that the 2012 floods “affected 134,371 people, displaced 64,473, injured 202, and killed 148.” Furthermore, Office for the Coordination of Humanitarian Affairs (OCHA) (2012) also revealed that toward the end of October 2012, “more than 7.7 million people had been affected by the floods, and more than 2.1 had registered as IDPs. 363 people were reported dead; almost 600,000 houses had been damaged or destroyed. Out of Nigeria's 36 states, 32 have been affected by the floods.”

Sadly, many coastal communities in the Niger Delta region, Nigeria were victims of the sea-level rise catastrophe. The Itak Abasi settlement community by Qua Iboe high sea in Ibeno Local Government in Akwa Ibom State, Nigeria was submerged in 2010. The inhabitants were forced into migration to Okoroutip and upenekang settlements. Ruiz and Vargas-Silva (2017, p.6) argued that the accidental influx of huge populations occasion by a natural disaster can increase the risk of disease outbreak such as malaria, competition for limited resources such as potable water, health care, and facilities. However, it is pertinent to note that the inhabitants of Itak Abasi have been suffered from all forms of socioeconomic challenges occasioned by post-catastrophic trauma. Couldrey and Peebles (2019,p.6) revealed that:

Our sense of safety is often distorted following a life-threatening event, and survivors can feel terrified at the slightest noise or sensory reminder... Survivors are frequently encouraged to separate the past from the present, recognizing that the life-threatening event is in the past and that now, in the present, they are safe.

Nevertheless, Church et al., (2001) argued that “beyond the 21<sup>st</sup> Century, substantial additional rises of sea level appear to be inevitable, and if climate change is not controlled, both Greenland and Antarctica could become significant sources of sea-level rise.” Therefore, the study interrogates the social implication of forced migration and vulnerability emanating from the sea-level rise that sacked the inhabitants of Itak Abasi coastal settlement in 2010



with a view of proffering solutions. To achieve this aim, the paper adopted a triangulation method of data gathering techniques.

### **Theoretical Framework**

The study is anchored on the trauma theory as its theoretical construct. The trauma theory was first propounded by neurologist Jean Martin Charcot, a French physician in the 19<sup>th</sup> century. Terr (1990,p.8) explained that trauma occurs “when a sudden, unexpected, overwhelming intense emotional blow or a series of blows assaults the person from outside. Traumatic events are external, but they quickly become incorporated into the mind.” Similarly, van der Kolk(1989,p.393) disclosed that “traumatization occurs when both internal and external resources are inadequate to cope with an external threat.” Bloom (1999, p.1) buttressed that:

Both clinicians make the point that it is not the trauma itself that does the damage. It is how the individual's mind and body react in its unique way to the traumatic experience in combination with the unique response of the individual's social group. Children are traumatized whenever they fear for their lives or for the lives of someone they love. A traumatic experience impacts the entire person -the way we think, the way we learn, the way we remember things, the way we feel about ourselves, the way we feel about other people, and the way we make sense of the world are all profoundly altered by a traumatic experience

Nevertheless, trauma theories have undergone various stages since after Charcot work on traumatized women in the Salpetriere hospital. Towards the end of the 19<sup>th</sup> century, Charcot focused on hysteria, “a disorder commonly diagnosed in women. Hysterical symptoms were characterized by sudden paralysis, amnesia, sensory loss, and convulsions.” However, Charcot further discovered that traumatic events can induce a hypnotic state his patients, hence, “describe both the problems of suggestibility in these patients, and the fact that hysterical attacks are dissociative problems— the results of having endured unbearable experiences” (van der Kolk, Weisaeth, and van der Hart, 1996, p. 50). Charcot theory was further developed by his students. For instance, Pierre Janet investigated the impact of a patient's traumatic experiences on personality development and behaviour. Freud established “intrapsychic theory and fantasy over external trauma, he did suggest that external trauma influence the patient's state of mind” (Diamond, 2004).

During the World War, psychiatrists discovered that soldiers who survived the war returned with “shell shock” syndrome. “Psychological first aid was first developed to help World War I soldiers overcome their symptoms of uncontrollable weeping and screaming, memory loss, physical paralysis, and lack of responsiveness” (Herman, 1992). The aim was to provide short intervention to assist the soldiers to recover. It was observed that providing intervention facilitated the quick recovery of soldiers after been traumatized by shell shock syndrome. In 1923, Abram Kardiner expanded the theory to what is referred to as modern trauma theory. Kardiner noted that “the subject acts as if the original traumatic situation were still in existence and engages in protective devices which failed on the original occasion” (cited in van der Kolk, et al., 1996, p. 58). Though the earlier theorists blamed the soldier's symptoms on poor moral character, Kardiner asserted that the traumatic symptoms were a normal response to an unbearable situation. The contemporary trauma theory was developed in 1942.



The new theory focused on civilians how they react to shock. Caplan (1961, p. 18) disclosed that:

In a state of crisis when they face an obstacle to important life goals... an obstacle that is, for a time, insurmountable by the use of customary methods of a problem- solving. A period of disorganization ensues, a period of upset, during which many abortive attempts at a solution are made.

Linking trauma theory to this study is anchored on the emotional trauma suffered by Itak Abasi a coastal community after the 2010 submerged incident, and subsequent forced migration. The overflows of seas have become more prevalent among people in coastal community in the Niger Delta region whether permanent or temporal during heavy rainfall. Empirical evidence has shown that most Niger Delta coastal inhabitants become more traumatized after flooding, erosion, or submerged of their coastal communities. The fact is that this mental state is rarely unnoticed because of the level of underdevelopment of the psychiatric health sector in Nigeria and other Third World countries at large. Those who lost their belongings, particularly shelter in a violent process undergo traumatic disorder and may result in some anti-social behaviour such as drugs, taking into alcoholic, excessive tobacco intake, fighting, suicide attempt, among others if not properly checked or managed. Hence, Seery, Silver, Holman, Ence, & Chu, (2008) noted that the “treatment approach is based on the assumption that encouraging expression of one’s thoughts and feelings about the traumatic event soon after it happens will bring about relief and resolution of symptoms.”

### **Sea Level Rise, Forced Migration and Human Security Among Coastal Communities**

The recent discovery of the change in weather alteration was made by the atmospheric scientists who noted that the ozone layer, especially above the Antarctic, was rapidly thinning (Barash and Webel, 2014, p.433 cited in Ogele, 2020, p.1). The consequences of ozone depletion were CFCs –chemicals used in industry, which include aerosol propellants, refrigerants, and in the manufacture of polystyrene. The depletion of the ozone layer had led to an increased temperature warming the oceanic waters. The oceans absorbed 85 percent of the excess heat trapped by the atmosphere since 1880 (Cazenave and Lovel 2010 cited in Union of Concerned Scientists, 2013, p.2). As the oceanic water kept warming, the water expands.

The glaciers moderately melt each summer and rise again each winter. As the temperatures keep rising, the ice growth in winter becomes less than ice melt in summer. The result is that nearly all the world’s surveyed glaciers, ice caps, and the Greenland ice sheet are losing ice, adding water to the oceans and causing global sea levels to rise (EPA 2012; cited Union of Concerned Scientists, 2013, p.2). The reduction in the land ice increased about a single edge to global sea level from 1993 to 2008 - accounting for the relative half increase during that season (Church and White, 2011).

Woodworth (1999) argued that the 20<sup>th</sup> - century sea-level rise was faster than the 18th and 19th Centuries. (Church et al., 2001 cited Nicholls, 2003, p.8) argued that it was tentatively related to the end of the ‘Little Ice Age’, which has nothing to with anthropogenic activities. The global sea levels rise was estimated to have increased from 10 to 20 cm during the 20th Century, but with no proof of acceleration. Consequently, “we experienced a significant sea-level rise during the 20<sup>th</sup> Century, which has arguably been one stress factor contributing to many of the existing coastal problems” (Nicholls, 2003, p.9)



Peterson, Stott, and Herring (eds) (2012) argued that flood, drought, and storms have occurred for millennia and while climate change has shown the alteration of the nature of climate-related hazards and trends...Brown (2008) argued that the greatest single effects of climate change are on human migration. The author argued that scientific communities should focus on introducing the degree and nature of human-induced climate change and its adverse effects of climate change on the coastlines. One of these effects is forced migration or displaced.

Warner, Dun, and Stal (2008, p.13) argued that environmental change such as climate change has become a new threat to human security. Confronted with an unimaginable degree of environmental change, the likelihood of migration as becoming a mechanism of first the resort or second survival option. Warner, et al (2008, p.14) argued that environmentally induced migration happens when the natural tipping points have been exceeded. The consequence is a pressure leading to human security threat; hence, people begin to consider environmental conditions into their migration decision.

Nevertheless, Dadush and Niebuhr (2016) maintained that “forced displacement typically takes place in a relatively short time frame and involves large numbers, unlike the more regular inflow of voluntary migrants... forced displacement can constitute a large demographic shock causing a sudden mismatch of supply and demand of public services and housing in the host community...inflow of foreigners disrupts established social and political equilibrium, business expectations can be adversely affected. This can delay or indefinitely impede the private investment response to rising demand for housing and services.” Similarly, Warner et al (2008, p.14) argued that the challenges of forced displaced have imperative such that there are needs to establish the rate to which migration helps households to secure the necessary standards of living. Koser (2008,p.17) noted that

Some of those moving as a result of the effects of climate change – for example, as a result of a general deterioration in living conditions because of regular flooding ...And in contrast to those displaced by conflict, many of those displaced by the consequences of climate change may never be able to return home because their places of origin have been destroyed or inundated.

Human security entails that individuals should be from any form of fear, intimidation, among others including environmental degradation. It means to protect humans or individual citizens or non-citizens from serious and persistent threats situations. Hence, Leckie (2008,p.18) argued that the “human rights approach to climate change, grounded in the principle of the inherent dignity of the human person, implies that it is not only the total numbers of those displaced that matter. Every single person who is forced from their home, against their will, must have a remedy available to them which respects their rights, protects their rights and, if necessary, fulfills their rights as recognized under international human rights law.” Some aspects of extant laws of international human rights legal code which is relevant and linked to climate change forced migration. Leckie (2008, p.18) revealed that these rights include:

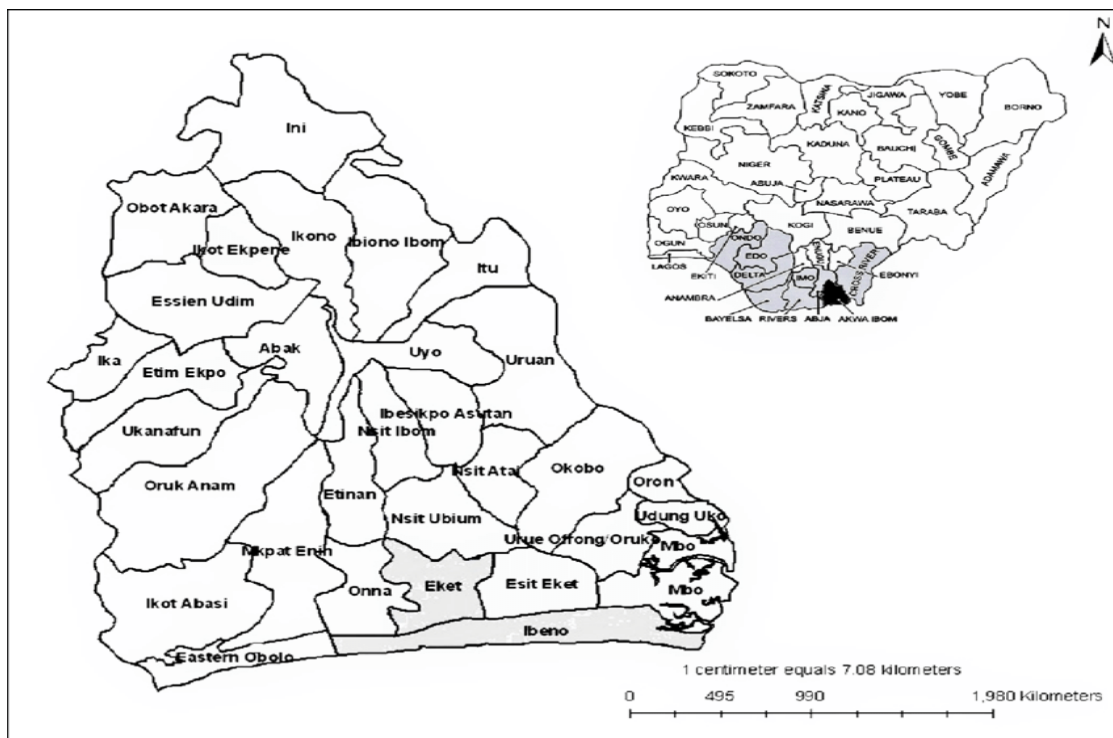
The right to adequate housing and rights in housing; the right to security of tenure; the right not to be arbitrarily evicted; the right to land and rights in land; the right to privacy and respect for the home; the right to property and the peaceful enjoyment of possessions; the right to security of the person, freedom of choice of residence and movement; and housing, land, and



property (HLP) restitution and/or compensation following forced displacement. All of these entitlements and obligations are so that people everywhere can live safely and securely on a piece of land, to reside within an adequate and affordable home with access to all basic services and to feel safe in the knowledge that these rights will be fully respected, protected and fulfilled.

### The Study Area

Itak Abasi community is a small island settlement of coastal community opposite the side of the Atlantic shore with a population of 1081 before the 2010 overflow (Nigerian Population Census, 2006). The Island settlement located along Qua Iboe high sea in the Ukpum Ete district, Ibeno local government area was carved out of the present Eket local government of Akwa Ibom State. It predominantly a fishing community settlement that was “completely wiped off by the 2010 flood, which forced settlement relocation by the surviving members of the community to other areas such as ‘Okoroutip’ while others opted to the other side of the Atlantic namely ‘Upenekang’, the most relatively stable and less disruptive by natural forces”(Akpabio and Brown, 2012,p.169). Ibeno is one of the 31 local government areas in the Akwa Ibom State. Ibeno is made of various coastal settlements bounded by the Atlantic Ocean known is Qua Iboe high sea.” It has a humid tropical climate characterized by high daily temperature (between 260 C and 330 C), relatively high annual rainfall (3000mm–4000mm), and very high relative humidity (>80%). The influence of the seawater contributes not only in moderating the high daily temperatures; it equally influences the relatively high annual rainfall situation in the areas” (Akpabio and Brown, 2012,p.169). The map below indicates the location of the Ibeno local government area in Akwa Ibom State.



**Fig. 1: Showing the Map of Ibeno Local Government Area, Akwa Ibom State**

Source: <https://www.researchgate.net/figure/Map-of-Akwa-Ibom-State-showing-the-location-ibeno>



## METHODOLOGY

The study adopted the triangulation method of data gathering using questionnaire and interview technique as sources of primary data, as well as textbooks, journals, internet material as sources of secondary data. The study adopted a random sampling technique, using a geographical cluster of Okoroutip and Upenekang settlements who were members of the Itak Abasi coastal community before the 2010 flood. To stimulate the data, the study adopted both structural questionnaires and unstructured interviews. In the study, a total of 150 questionnaires were administered among the respondents, out of which 138 were retrieved and used as analysis. 92 percent of the total questionnaires represent the reliability of the study. The questionnaire's graphic method of data presentation as shown below:

**Table 1: Questionnaire Distribution**

<b>Geographical cluster</b>	<b>Issued Questionnaire</b>	<b>Returned Questionnaire</b>	<b>Percentage</b>
Okoroutip Settlement	75	68	49 %
Upenekang Settlement	75	70	51 %
<b>Total</b>	<b>150</b>	<b>138</b>	<b>100</b>

## Profile of the Respondents

Based on this, the demographic data were presented and analyzed. The details of the academic qualification of the respondents were shown in Table 2 below.

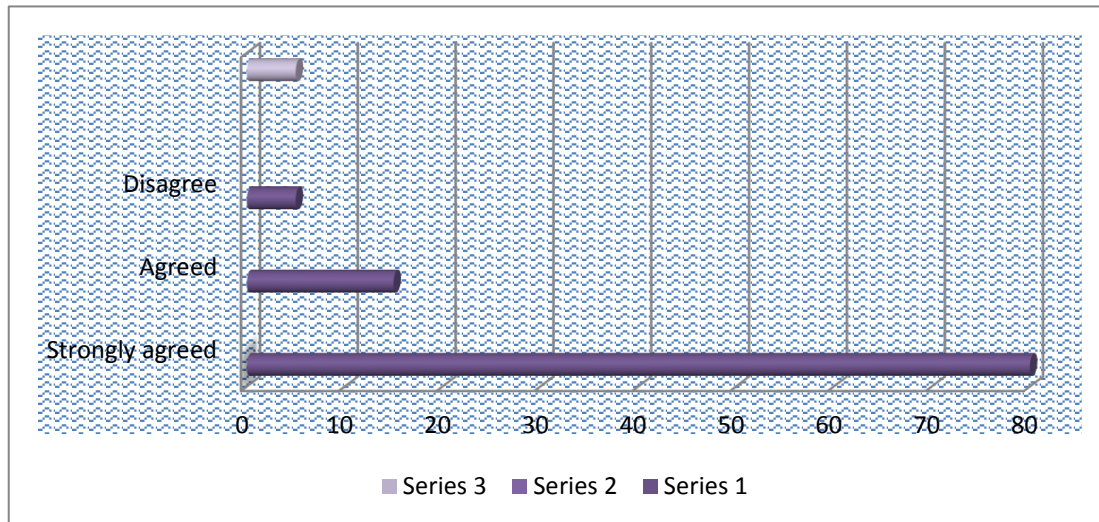
**Table 2: Questionnaire Distribution**

<b>Qualification</b>	<b>Frequency</b>	<b>Percentage</b>
Primary Six	86	62
WAEC/SSCE/ Equiv.	31	22
NCE/OND/Equiv	7	5
BSc/BA/HND	5	4
MSc/MA/Equiv	-	-
Ph.D	-	-
Others	9	7
<b>Total</b>	<b>138</b>	<b>100</b>

Similarly, 12 persons comprised of elders, youths, and women were interviewed. They include three elders, five youths, and four women who were inhabitants of the island including fishermen who were fishing at the time of the study. However, all of the interviewed pleaded to be anonymous. All the interviewees were selected through random sampling.

### Forced Migration Adversely Impact on Education

The bar chart below shows the response generated from the sixth question on the questionnaire that sought to ascertain if forced migration has a direct impact on the education of the former occupants of the Itak Abasi coastal community. The responses are as follows: 80 % was affirmative, 15% agreed, while 05 % said no that there are schools at the mainland. Based on the responses, forced migration occasioned by sea-level rise has a serious impact on education.



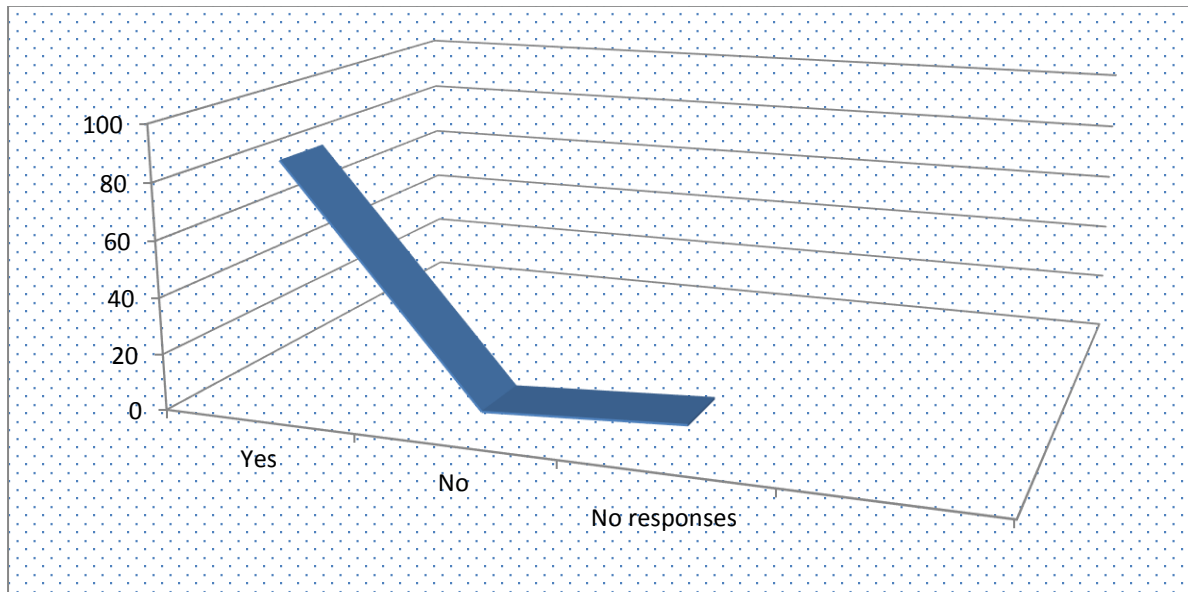
**Fig. 2: Showing how Forced Migration Adversely Impacted on Education among Itak Abasi Coastal Community.**

*Source: Constructed by the author*

### Sea Level Rise Leads to an Increase in Economic Loss (Unemployment and Food Security).

The line chart below explains the response generated from the eighth question on the questionnaire, which sought to ascertain if the sea-level rise increased the unemployment rate and food security. The responses are as follows: 86 % was in affirmative, while 5 % said no, and 9% no response. Based on responses, a sea-level rise leads to an increase in unemployment and a shortage of food security in the Itak Abasi community.



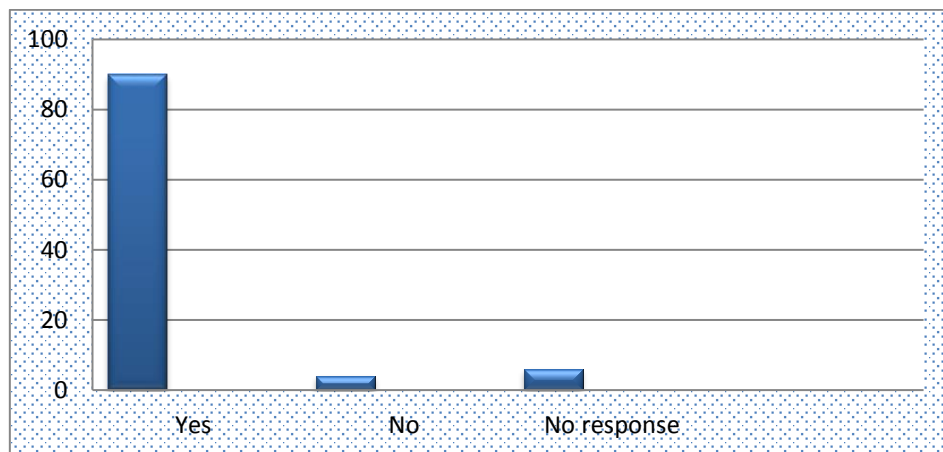


**Fig. 3: Showing how Sea Level Rise Led to an Increase in Economic Loss (Unemployment and Food Security) in the Itak Abasi Coastal Community.**

*Source: Constructed by the authors*

### **Sea-Level Rise Adversely Impacts Family Bonds.**

The column chart below indicates the response generated from tenth questions on the questionnaire, which sought to ascertain if sea -level rise adversely impacts family bonds in the Itak Abasi community. The responses are as follows: 90 % was affirmative, 4% said no, while 6% no response.

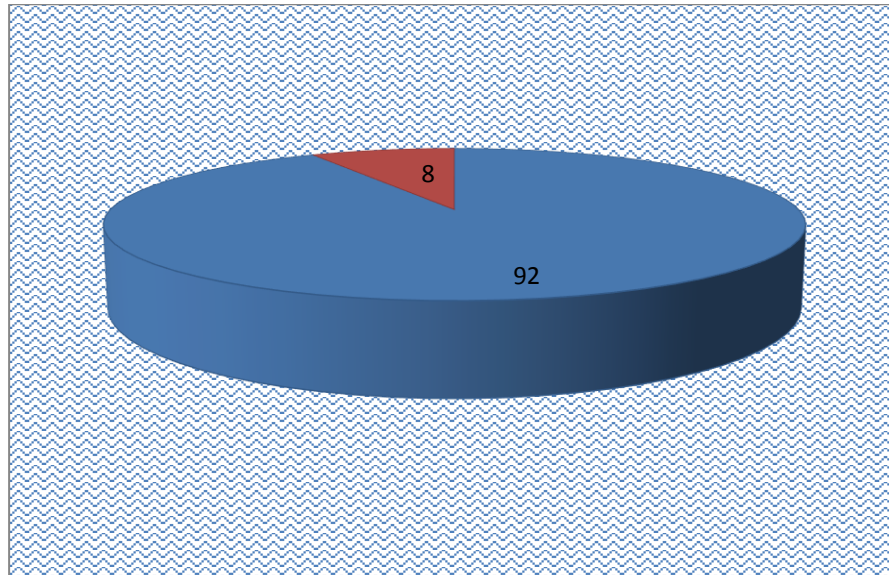


**Fig. 4: Showing how the Sea-Level Rise Adversely Impacted Family Bonds in the Itak Abasi Coastal Community.**

*Source: Constructed by the authors*

**Forced Migration Arising from Sea Level Rise Leads to Public Health Challenges.**

The pie chart below indicates the response generated from eleventh questions on the questionnaire, which sought to ascertain if forced migration arising from sea-level rise led to public health challenges in the Itak Abasi community. The responses are as follows: 92 % was affirmative while 8% no response.



**Fig. 5: Showing how Forced Migration Arising from Sea Level Rise Leads to Public Health Challenges.**

*Source: Constructed by the authors*

**DISCUSSION OF FINDINGS****Sea Level Rise and Forced Migration**

Shen, (2013) cited in Stapleton, Nadin, Watson, and Kellett (2017,p.12) asserted that “human mobility is an age-old phenomenon driven by numerous factors: people move in search of better economic and employment opportunities, due to changing policies at home or abroad, to escape conflict and social persecution, or in combination with natural hazards and environmental degradation affecting their livelihoods.” From the finding, the respondents overwhelmingly agreed that sea-level rise led to forced migration from Itak Abasi coastal community to their present residence. One of the respondents said “It was an unprepared journey. But we had to move. Some of us have inhabited here for years. Though, there were no essential social amenities such as electricity which was needed to sustain their business and comfort. But gives us comfort compared to where are now.” Some of the inhabitants migrated to Okoroutip and Upenekang settlements, others to relatives in other communities. Though, there was limited support from the government. All the promises made during this disaster were not kept. Hence, Stapleton et al (2017,p.12) argued that “vulnerability can be thought of as how susceptible people, and the systems upon which they depend, are to suffering harm, when a shock, hazard or stress occurs, such as a flood, conflict or economic

downturn.” Below are the pictures indicating a new settlement of remains of the Itak Abasi community without any form of social amenities or furniture after sea level rise in 2010.



**Fig 6: Picture Showing an Extension of the New Settlement of the Remains of Itak Abasi Community Without any form of Social Amenities after Sea Level Rise in 2010**

*Source: Field Survey 2019.*

### **Forced Migration and Education.**

The sea-level change comes unannounced most times. From the findings, the respondents acknowledged that sea-level rise that submerged of Itak Abasi settlement came unannounced. Sadly, it comes with the destruction of lives and properties since there was no prior warning. Some of the respondents admitted that they lost their belongings, including the children's school materials such as books and other reading and writing materials. The effect of migration from the island negatively impacted their ward's education. Some of their wards stayed out of school for months, while other children were distributed among relatives in other communities. This movement affected their academics. Some of them have to repeat class, while others went to acquire skills. Yet, another challenge was how to get the required school materials such as school uniforms, books, among others. Below indicates the picture of the destroyed primary school.



**Fig 7: Picture showing destroyed Itak Abasi community primary school.**

*Source: Field Survey 2019.*

### **Sea Level Rise Leads to an Increase in Economic Loss (Unemployment and Food Security).**

The findings revealed that sea-level rise is associated with huge economic loss, especially among the coastal communities. A greater percentage of the inhabitants of coastal communities depend on sea resources and food crops for their survival. However, sea-level rise submerges their natural pounds, plantations, coca yams, among others. The present conditions of the Itak Abasi inhabitants have been easy and the recovery rate is very slow. Some of the inhabitants that continued to inhabit the remaining island disclosed that the overflow affected everything on the island. The wetland affects crops and makes them look stunted and poor harvest. The increase in sea level makes it difficult for the local fishermen to lunch deep in the sea, hence, creates unemployment, except those that have modern fishing boats. One of the respondents disclosed that “we can no longer get big fish. Except, we



launch deep and that would have been possible if my boat is with me but I lost at the 2010 overflow.” One elderly respondent lamented that “we have to sell fish to buy other food items if there is no fish to sell, then hunger and frustration set in.” Dadush and Niebuhr (2016) noted that “forced migrants tend to arrive in places where there are few job opportunities for them. The problem of finding a livelihood is far more severe...” The pictures below indicate the fishermen, economic trees, stunted plantain, and flooded farmland in Itak Abasi coastal community.



**Fig 8: Picture Showing Fishermen- Samuel Eta Williams, John Titus Jeremiah and Isong Isaac, and Salome Harrison with her son Harvesting Roofing Leaves, Stunted Plantain, and Destroyed Flooded Farmland**

*Source: Field Survey, 2019*



### Sea Level Rise Adversely Impact Family Bonds

From our findings, the sea-level rise phenomenon adversely impacted on the family bond. In Africa, family bonding is very essential in raising a strong community. Most children in Africa stay with their parents until they set for marriage or labour mobility in the cities. However, sea levels rise for parents to distribute their children among their relatives in other communities. Itak Abasi coastal settlement was not an exception. One of the respondents lamented how she distributed her children among her relatives. Her husband left for his maternal home. She has to continue her fishing business here. She further disclosed that she has never seen her children for three months and doesn't know how they are surviving. Other respondents revealed that the overflow affected the family bonds. Some of their children have joined street gangs because of bad influence out there, while of their coastal community girls were made pregnant, hence, were forced into marriage. One of the respondents lamented that family meeting has been forgotten because the incidence scattered everybody in the coastal community. Life outside the coastal community is challenging because he has lived there since his birth. We can no longer find some of our church members. Besides, the effects of the forced migration also adversely impacted on the pupils who were used to the former school environment, classmates, and teachers. Many of these people cannot be located by the pupil. The cost of losing childhood peers and friends, community, and church members is immeasurable. It can be asserted the children also faced a mental challenge, maybe unnoticed by their parents or guardian based on finding while interrogating a boy who was a resident of the Itak Abasi community before the incident. Below indicates the picture of the mono pump water which the short pole in standing the water in the middle of the island community. Ahead of the mono-pump were the Town Hall and Deeper Life Bible Church, Itak Abasi, which was located at the centre of the community and other blockhouses that were all submerged by the 2010 sea-level rise in Okoroitak Island in the Itak Abasi coastal community.



**Fig 9: Picture Showing Submerged Mono Pump, Deeper Life Bible Church, Itak Abasi, and Itak Abasi Town Hall**

*Source: Field Survey, 2019*



## **Forced Migration and Public Health Challenges**

From our findings, the sea level rise attracted the attention of the state government who made a temporal place as internally displaced persons (IDP) camp. The camp was hurriedly put together. Public health is very critical at the moment of a cluster of different persons of various health issues. Though, the camp was without electricity, a toilet nor pipe born water. It became very difficult to maintain hygiene, especially the children and the elderly. One of the respondents disclosed that life was unbearable. In the camp, you will indiscriminate faeces littered here and there. It was common to find waste faeces disposed of in polythene bags. This assertion collaborated with Ogele (2020, p.1764) when he pointed out that “the flood victim’s camps are confronted with various challenges such as toilet facilities, water-borne diseases, and other health issues.” The “people in flood areas are infected with fever, cholera, dysentery, diarrhoea and other diseases, due to their contact with contaminated drinking water and wastewater facilities, as well as vector-borne diseases arising from flooding” (cited in Ogele,2020,p. 1764).

## **CONCLUDING REMARK**

The study has shown how coastal communities in the Niger Delta region and Nigeria at large suffer, particularly from the sea level rise occasioned by climate change. The Itak Abasi coastal settlement was not an exception to the catastrophe arising from the overflow of shoreline. In 2010, the entire settlement of the Itak Abasi coastal community was hit with shoreline overflow from Qua Iboe high sea that led to forced migration. The consequences are unimaginable. The displaced inhabitants faced serious socioeconomic challenges ranging from the loss of family bonds, drops out of school, loss of jobs, among others. While at the temporal camp, there were limited facilities such as toilet and water system, electricity, among others. They also faced health challenges as a result of poor facilities such as malaria, diarrhea, and mosquito bit, among others. It was serious traumatization for the displaced persons to see members of their families scattered all over or taking refuge in other communities. Presently, it is still a big reconnect with other members of your family, church, social organization, among others as some of the respondents lamented. While the study acknowledges the challenges that go with internally displaced persons and its effects of human security, it is pertinent for the government to put precautionary measure since the climate change and its effects are real, hence, the government should take practical steps in protecting coastal communities such as fast-tracking the Niger Delta Development Commission projects, particularly the Itak Abasi/Okoritik community’s shoreline protection/embankment that should protect the remaining parts of the Itak Abasi Island. Furthermore, to avoid a repeat of the Itak Abasi 2010 flood experience, the NDDC should also complete the Upenekang/Iwuoachang shoreline protection/ embankment where some of the displaced Itak Abasi inhabitants are seeking refuge. The NDDC and the federal government should extend the shoreline protection/ embankment projects to other Niger Delta settlements where sea-level rise has become a threat.

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## REFERENCE

- Akpabio, E.M. and Brown, A.s.(2012).The Reality and Tough Choices about Water and Sanitation in Nigeria's Coastal Settlements: a Preliminary Discussion. *Nordic Journal of African Studies* 21(4): 164–182. Retrieved from: [http://www.njas.helsinki.fi/pdf-files/vol21num4/akpabio\\_brown.pdf](http://www.njas.helsinki.fi/pdf-files/vol21num4/akpabio_brown.pdf)
- Brown,O.(2008). The numbers game. In Marion Couldrey & Maurice Herson (Eds) *Forced Migration Review: Climate change and displacement*. Issue 31 October. Oxford. Image Pub.
- Church, J.A., and White,N.J. (2011). Sea-level rise from the late 19th to early 21st century. *Surveys in Geophysics* doi:10.1007/s10712- 011-9119-1
- Church, J.A., Gregory, J.M., Huybrechts, P., Kuhn, M., Lambeck, K, Nhuan, M.T., Qin, D. and Woodworth, P.L., 2001. Changes in Sea Level. In: Houghton, J.T., Ding, Y., Griggs, D.J., Noguer, M., van der Linden, P.J. and Xiaosu, D. (eds.) *Climate Change 2001. The Scientific Basis*. Cambridge University Press, Cambridge, pp.639-693
- Couldrey,M. and Peebles,J.(2019). *Forced Migration Review: Education: needs, rights and access in displacement*. Issue 60. March. Retrieved from: [https://www.fmreview.org/sites/fmr/files/FMRdownloads/en/education-displacement/FMR60\\_Education\\_2019.pdf](https://www.fmreview.org/sites/fmr/files/FMRdownloads/en/education-displacement/FMR60_Education_2019.pdf)
- Dadush,U. and Niebuhr,M. (2016). *The Economic Impact of Forced Migration*. OCP Policy Center. April. Retrieved from: <https://carnegieendowment.org/2016/04/22/economic-impact-of-forced-migration-pub-63421>
- Diamond, D. (2004). Attachment disorganization: The reunion of attachment theory and Caplan, G. (1961). An approach to community mental health. New York: Grune & Stratton. *psychoanalysis. Psychoanalytic Psychology*, 21(2), 276–299.
- International Federation of Red Cross and Red Crescent Societies (IFRCRCS) (2012). *Emergency Appeal Nigeria: Floods*. Retrieved from: <https://reliefweb.int/sites/reliefweb.int/files/resources/MDRNG014PEA.pdf>
- Herman, J. (1992). *Trauma and recovery*. New York: Basic Books.
- Koser, K.(2008). Gaps in IDP protection. In Marion Couldrey & Maurice Herson (Eds) *Forced Migration Review: Climate change and displacement*. Issue 31 October. Oxford. Image Pub.
- Leckie, S.(2008). Human rights implications. In Marion Couldrey & Maurice Herson (Eds) *Forced Migration Review: Climate change and displacement*. Issue 31 October. Oxford. Image Pub.
- Nicholls, R.J.(2003). *Working Party on Global and Structural Policies OECD Workshop on the Benefits of Climate Policy: Improving Information for Policy Makers*. Case study on sea-level rise impacts. France. OECD Pub.
- Ogele, E. P. (2020). Climate Change and Human Security in Rivers State, Nigeria. *International Journal of Advance Research and Innovative Ideas In Education*, 6(2), 1757-1769. Retrieved from: [www.ijariie.com/FormDetails.aspx?MenuScriptId=180682](http://www.ijariie.com/FormDetails.aspx?MenuScriptId=180682)
- Ogele, E.P. and Egobueze, A. (2020). The Artisanal Refining and Socioeconomic Development in Rivers State, Nigeria, 2007-2017. *International Journal of Research and Innovation in Social Science (IJRISS)* vol.4 issue 4, pp.16-25 . <https://www.rsisinternational.org/journals/ijriss/Digital-Library/volume-4-issue-4/16-25.pdf>



- Office for the Coordination of Humanitarian Affairs (OCHA) (2012). Floods Situation Report. Retrieved from: <https://reliefweb.int/report/nigeria/floods-situation-report-no-2-15-november-2012>
- Peterson, T., Stott, P. and Herring, S. (eds) (2012). Explaining Extreme Events of 2011 from a Climate Perspective. Bulletin of the American Meteorological Society, July: 1041-1067.
- Relief Web(2012). Nigeria: Floods. Retrieved from: <https://reliefweb.int/disaster/fl-2012-000138-nga>
- Ruiz,I. and Vargas-Silva,C. (2017).The Consequences of Forced Migration for Host Communities in Africa. Dans Revue d'économie du développement 3-4 (Vol. 25), p. 135 -154. Retrieved from: <https://www.cairn.info/revue-d-economie-du-developpement-2017-3-page-135.htm#>
- Stapleton, S.O. Nadin,R., Watson,C. and Kellett,J.(2017). Climate change, migration and displacement.The need for a risk-informed and coherent approach. London. Overseas Development Institute and United Nations Development Programme Pub. Retrieved from: [www.odi.org](http://www.odi.org)
- Terr, L.,(1990). Too Scared To Cry: Psychic Trauma in Childhood. New York: Harper and Row Pub..
- Trenberth, K.E., Smith, L., Qian,T., Dai,A. and Fasullo,J. (2007). Estimates of the global water budget and its annual cycle using observational and model data. Journal of Hydrometeorology 8:758–769
- Union of Concerned Scientists (2013). Causes of Sea Level Rise. Retrieved from: [https://www.ucsusa.org/sites/default/files/legacy/assets/documents/global\\_warming/Causes-of-Sea-Level-Rise.pdf](https://www.ucsusa.org/sites/default/files/legacy/assets/documents/global_warming/Causes-of-Sea-Level-Rise.pdf)
- Van der Kolk, B.,(1989). The compulsion to repeat the trauma: Reenactment, revictimization, and masochism. Psychiatric Clinics of North America. 12: p. 389-411.
- van der Kolk, B. A., Weisaeth, L., and van der Hart, O. (1996). History of trauma in psychiatry. In B. A. van der Kolk, A. McFarlane, & L. Weisaeth (Eds.), Traumatic stress: The effects of overwhelming experience on mind, body and society (pp. 47–76). New York: Guilford Pub.
- Warner,K., Dun, O. and Stal,M. (2008). Field observations and empirical research. In Marion Couldrey & Maurice Herson (Eds) Forced Migration Review: Climate change and displacement. Issue 31. October. Oxford. Image Pub.