



## **AVOIDABLE FLOOD DISASTERS IN THE NIGER-DELTA (IJAW) TERRITORIES: COSTS, CONSEQUENCES OF REACTIONARY MEASURES, AND RECOMMENDED PERMANENT SOLUTIONS**

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A Report Prepared for the Central Leadership of the Ijaw Flood Impact Coordinating Unit (IFICU)

Prepared By: IFICU - Technical Flood Management Committee

December 2018

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## Transmission Letter (via Email)

December 31<sup>st</sup>, 2018.

### Attention:

Comrade Rosemary Aken-Graham Naingba  
*Convener, Ijaw Flood Impact Coordinating Unit (IFICU)*

Comrade Yangaboy Erekedoumene  
*Secretary, Ijaw Flood Impact Coordinating Unit (IFICU)*

Dear Comrade(s):

### **Re: Propose Workable and Acceptable Flood Management Strategies for Ijaw Communities**

Further to your request to carry out the aforementioned assignment, please find enclosed the final report.

The report describes the gravity of uncurbed flooding incidents, namely their contributory factors and the devastating impacts of two recent flood disasters (2012 and 2018) on citizens and/or residents of the Niger Delta territories. The report also highlights important measures for checking future recurrence, which, if granted considerable attention for execution by concerned and relevant apparatuses of government with requisite collaborations from stakeholders, will mitigate avoidable flooding in the Niger-Delta territories.

Prefaced by the Dutch and Louisiana experiences of catastrophic incidents of flooding, which resulted directly from natural disasters—hurricanes, tsunamis, etc.—such as have never been witnessed in any of the geographic territories of the Niger Delta coasts, the report deploys several appendices describing floods and management measures as part of pooled resources from members of the Ten-man Technical Flood Management Committee, including minutes from several teleconference meeting discussions.

While the report adduces to the joint responsibility of all stake holders in terms of protecting the Niger Delta from flood and other environmental risks, there is no mistaking the fact that this is one of the core responsibilities of elected governments, particularly in democratic economies. As such, the report, it is hoped, will serve as a wakeup call for collaborators to synergize, partnerships to coalesce, and resources be mandatorily set aside to prove that bitter lessons have been learned to wit “we”, the Niger Delta peoples may, like the Dutch say, “NEVER AGAIN!” shall our fate be at the whims and caprices of flood or any other form of environmental dislocation or disaster.

On behalf of the Technical Flood Management Committee, we are thankful to the Niger Delta people for opportunity to serve, and fervently hope that details penned herein shall be utilized in ensuring that every Niger Delta life become precious going forward.

**David O. Olali, PhD**  
**Committee Chair**

**Doubra Charles Ambaiowei, PhD**  
**Committee Secretary**

*CC: All Members of the IFICU - Technical Flood Management Committee*

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<sup>1</sup> Mr. Jenkins Ebiware requested permission to be excused due to other project commitments. Yet, he was a great asset in that he made significant contributions to the conversations on not just the most recent flood, but equally on other related issues pertinent to both Ijaw and the Niger Delta.

## Preface

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Contrary to opinions in several quarters, the repeated releases of water from the Lagdo Dam<sup>2</sup> (in Cameroon) on the River Benue were the real culprits in the recent flood disasters in the Niger Delta, causing quantum damage in economic hardships, human displacement, but importantly, exposing acute unpreparedness on the part of those at the helms of affairs, precisely at State and Federal levels. Arguably without the dam there may still be perennial flooding in the Niger Delta due to 6-9 months of rainy season. But rains in the Niger Delta ecological zones do not come anything near the Monsoon type, as are witnessed in other regions of the world (India and Asia). Consequently, what ought to be of serious cause for alarm in the case of Niger Delta flood disasters are the now-historic characteristic ineptitude, sheer lack of will, and a totally unfazed leadership. These latter human posturing on the Niger Delta, while not excusing the realities of either heavy rains à la global warming and the resultant climate changes, or even the release of trapped Lagdo Dam waters, are the direct causes of the type of floods witnessed in 2012 and 2018.

Additionally, but definitely not surprising, the sheer lack of record keeping of and follow-up on ecological, environmental and studies of the Niger Delta Region (since pre-Independence era up till date) continue to plague the region.

Finally, part of the aim of this report is a pursuit in change in orientation about ecological matters in particular, and a reevaluation of leadership aptitude and attitude with regards to avoidable consequential natural and man-made disasters in the ND region.

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<sup>2</sup> The Lagdo Dam has a substantial hydroelectric power potential of 700MW, and has an installed capacity of 84 MW, but only one turbine of 21 MW is in use. Thus, the dam is completely underused even for flood control because the reservoir is allowed to be filled beyond its use. See *“Technical Flood Management Individual Report on the Niger Delta”* (Mr. P. Edu) - Appendix 1a.

## Executive Summary

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On October 21<sup>st</sup>, 2018, the central leadership of the Ijaw Flood Impact Coordinating Unit (IFICU), in its resolve to meet its demands and objectives inaugurated a Ten-man Technical Flood Management Committee, to handle the technical aspects of the IFICU. This committee was initially obligated to complete the underlisted assignments:

1. To carry-out an ecological survey on Niger-Delta Ijaw communities and collate flood prone ijaw communities according to their peculiarities;
2. To find out the causes of flood in ijaw communities using the 2012 and 2018 floods as a case study;
3. To determine the level of flood impact and damage in flooded ijaw communities using the 2012 and 2018 floods as case study;
4. To propose workable and acceptable flood management strategies, with regards to cost, applications and expected results if applied in flooding ijaw communities; and
5. To produce a comprehensive IFICU Flood Management Document made up of the reports from assignments Nos. 1, 2, 3 and 4.

It was resolved among participating members that assignment Nos. 2 through 5 constitute the least ambiguities, while No. 1, ecological surveys - required heavy financial commitments and a defined scope, thus less feasible. It was further decided that, such surveys may have been captured in previous efforts of some government commissions and parastatals such as, Niger Delta Development Commission (NDDC) and Niger Delta Development Basin Authority (NDBA).

Based on the aforementioned understandings and premises, this Technical Committee proceeded to find the opportunities within assignment Nos. 2 through 5, with particular emphasis on assignment No. 4.

Discussions were held over the WhatsApp messaging platform, and teleconference meetings on October 27<sup>th</sup>, November 10<sup>th</sup>, November 24<sup>th</sup> and finally on December 15<sup>th</sup>. Written papers and articles, YouTube videos, and a statement from the Ijaw Professionals Association (IPA) on "*Environmental Emergencies in the Niger-Delta*" were referenced as part of a comprehensive review of both historic and recent approaches to understanding and mitigating against flood events.

It is instructive to note that there was a general lack of reference information from past studies specific to the Niger-Delta (Ijaw) territories, or Nigeria in general. While it was established in some cases that such materials exist, accessibility was deficient.

Notwithstanding, this committee has applied its experiences, education and skills to the task.

This report recommends general and applicable methodologies including any noteworthy aspects that should be considered as part of immediate and future efforts to mitigate and manage the impact of flooding in the Niger-Delta (Ijaw) territories. These measures consist of a combination of proactive action plans that integrates risk awareness, preparedness, hazard response and the importance of public safety, to create a flexible and adaptable flood mitigation program.

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# 1 Background and Introduction

## 1.1 Flood Risk

To go with a pedestrian definition of flood, it is an accumulation of water over normally dry areas. When such accumulations of water remain at given areas over prolonged periods, they create hazardous conditions which are conducive to the festering of diseases, dangerous bacteria, loss of property and lives, productive hours, etc. Ranging from mild to severe, losses from flood disasters are not altogether unavoidable.

Identifying areas of potential flooding does not outright eliminate portending dangers. A common method for determining flood risk or vulnerability identifies both the probability<sup>3</sup> and the consequences of flooding. The consequences of a flood are the estimated impacts associated with the flood occurrence—and its incidents. Consequences relate to human activities within an area and how flood impacts the natural and built ND environments.

## 1.2 Floods in the Niger Delta Region

Statutorily, protecting the Niger Delta region (hereafter referred to as “ND region”) from flood risks is the responsibility of all tiers of governments, particularly, at the Federal and state levels. In 2012 and 2018, ND region experienced the worst effects of flood since the twentieth century. While the ensuing crises from both flood incidents had been attributed to a combination factors—very heavy local rainfalls (traceable to extreme weather and climate changes) and the releases of excess water from the Lagdo Dam in nearby Cameroon, flooding incidents remain, among other ill-addressed environmental issues, recurring currency in the ND region.<sup>4</sup>

## 1.3 Use of this Report

The goal of this report is to help inform and enable relevant governments of the region and its agencies, stakeholders, communities and residents about available and/or appropriate actionable steps to reduce and manage the impacts of future flood risk. The information provided in this report should be used in conjunction with other efforts of this nature to:

- Develop Regional, State and Local Flood Hazard Mitigation Plans and Projects;
- Develop Comprehensive Community Flood Plans and Programs;
- Develop Emergency Operations and Response Plans;
- Educate, Communicate and Create Awareness about Flood Risk; and
- Develop Regional, State and Local Transportation Infrastructure and Building Specifications and Standards.

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<sup>3</sup> The probability of a flood is the likelihood that a flood will occur. The probability of flooding can change based on physical, environmental, and/or contributing engineering factors. Factors affecting the probability that a flood will impact an area range from changing weather patterns to the existence of mitigation projects. The ability to assess the probability of a flood and the level of accuracy for that assessment are also influenced by modeling methodology advancements, better knowledge, and longer periods of record for the water body in question.

<sup>4</sup> Ologunorisa, Temi. “An Assessment of Flood Vulnerability Zones in the Niger Delta, Nigeria.” *International Journal of Environmental Studies*, vol. 61, no. 1, 2004, pp. 31–38; Giraud Gaël, et al. “Crisis and Relief in the Niger Delta (2012–13): Assessment of the Effects of a Flood on Relational Capabilities.” *Oxford Development Studies*, vol. 46, no. 1, 2018, pp. 113–131., doi:10.1080/13600818.2017.1328046.

## 2 Case Study Experiences

The following sections provide lessons learned from two case studies reviewed in the task to understand floods and flood mitigation systems.

### 2.1 Flood Experiences

From numerous deadly encounters with Mother Nature, the Dutch reached the conclusion that that it is better to find ways to let the water in, rather than fighting to keep it out. The YouTube video referenced, details how the Netherlands was wrested from the North Sea, with about a third of the country lying below sea level.<sup>5</sup>

Refusing to be a sitting duck awaiting the final blow from the North Sea, the Dutch (Netherlands) creatively led the design and construction of a network—complex system of dikes, pumps and sand dunes—of sophisticated flood control systems in the world.

The ND region can learn from the Dutch by first appreciating the fact that the current state of our cities, communities and infrastructural systems are not fit for the present, not to mention the future.

Therefore, in the timeless words of Henk Ovink:

**We must change the way we think about water management, not just after a flood, but before they happen. Living with water really means that we have to understand water's capacity, and water brings a lot of good - we need it for our food, we need it for drinking. At the same time, it can be dangerous when we have too much, or dangerous when we have too little.**

The case of Louisiana is particularly remarkable.<sup>6</sup> It emphasizes the possibilities when there is determination and a common will to tackle challenges. Understanding its peculiar terrain, the State of Louisiana built a strategically located barrier to combat flood risks from storm surges. The project though estimated for a 20-year construction period; it was completed just under 5-years. This project was a direct and immediate response to avoid a repeat of the disasters experienced after hurricane Katrina.

In addition to this sophisticated flood control system, New Orleans has completely modified its approaches to constructing their pavement and building infrastructure. This attitude is particularly instructive for the region and its leadership.

Section 3 of this report highlights various aspects of the flood mitigation measures as seen in the YouTube videos.

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<sup>5</sup> Holland's Barriers to the Sea: <https://www.youtube.com/watch?v=aUqrBV4SiqQ>

<sup>6</sup> The Great Wall of Louisiana: <https://www.youtube.com/watch?v=7xOWEbq6WRM>



### 3 Flood Mitigation Measures

Mitigation of flood disasters provides the critical foundation for outright circumventing or at cushioning the impacts of flooding hazards. This practice creates safer communities and facilitates both preparedness and requisite resilience for society to return to normalcy in business, governmental, economic, and other functions as quickly as possible, especially after an incident. Once a community understands its flood risk, it is in a better position to identify potential mitigation actions that reduce the risks to lives and property.

The ND region must define a comprehensive platform of its flood risk, which may require returning to previous assessments and/or forging new frontiers of collaborations between tiers of governments and private/public partnerships. In this regard, and specific to Bayelsa State, the Dutch work on ND environmental concerns would be a highly helpful instrument in further developing a flood master plan for (any of) the ND States.<sup>7</sup>

In addition to lessons learned from the committee's discussions, this report includes several written submissions that focused on identifying various flood mitigation interest areas. Some of the notable interest areas identified include:

- Dams;
- Levees and Major Embankments;
- Coastal Structures such as Jetties, Groynes and Sea Walls;
- Stream flow constrictions;
- At-Risk Essential Transportation Infrastructures (*routes damaged or overtopped during flooding events; case-in-point is the Tombia-Amassoma Road and the East-West Road*);
- Areas of Significant Land Use Change;
- Drainages;
- Areas of Past Mitigation Success (*Case-in-point is the sea wall constructed in Bolou-Orua Town, Sagbama Local Government Area. This initiative minimized or eliminated the 2018 flood risk of the town when compared to the impact it suffered from the floods of 2012. Efforts of this nature are commendable and should be encouraged*).

Succeeding sub-sections discuss flood mitigation actions, which generally fall into different categories<sup>8</sup>.

#### 3.1 Preventive Measures

Preventative measures are intended to keep flood hazards from getting worse. They can reduce future vulnerability to flooding, especially in areas where development has not yet occurred or where capital improvements have not been substantial. Examples include:

- Comprehensive Land Use Planning;

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<sup>7</sup> While substantial ecological and environmental research has been done in regard to ND region, a dearth and paucity of important archival and digital materials directly relating to the Bayelsa flood continues to be a major hinderance to following through on progress. For instance, while a preliminary report of the Dutch efforts exists, regrettably, this committee was unable to access that document which the Bayelsa government was directly involved in.

<sup>8</sup> FEMA, 2003, "Developing the Mitigation Plan: Identifying Mitigation Actions and Implementing Strategies", FEMA 386-3. Washington, DC, April 2003.

- Zoning and Sub-division Regulations;
- Open Space Preservation;
- Building Codes;
- Floodplain Development Regulations; and
- Developing and Encouraging Participation in Community Flood Control Rating Practices.

### **3.2 Property Protection Measures**

Property protection measures include measures to protect existing structures and constructions through modification and total relocation or removal procedures. These will include:

- Comprehensive Land Use Planning;
- Building Relocation;
- Acquisition and Clearance;
- Building Elevation; and
- Barrier Installations.

### **3.3 Natural Resource Protection Activities**

These include environment conservation efforts aimed at protecting, preserving, reserving or restoring certain areas from the threats of flood devastations. Such areas will include:

- Wetland Protection;
- Habitat Protection;
- Erosion and Sedimentation Control;
- Best Management Practices;
- Prevention of Dumping Practices in Streams and Drainage Systems (Anti-Litter Campaigns); and
- Improved Forestry Practices such as Reforesting.

### **3.4 Structural Mitigation Projects**

Structural mitigation projects lessen the impact of floods. Structural protection efforts include maintenance and/or upgrading of dams/levees and other critical infrastructural facilities. However, residents should be made aware of their residual risk. Examples include:

- Reservoirs, Retention, and Detention Basins;
- Levees and Floodwalls; and
- Channel Maintenance and Modifications.

### **3.5 Public Education and Awareness Practices**

Public education and awareness activities enlighten residents, business owners, potential investors, and tourists about flood hazards, and available flood mitigation options. Examples include:

- Readily Available and Readable Updated Maps;
- Outreach Projects;
- Library resources;
- Technical Assistance;

- Environmental Education;
- Audio-visual materials;
- Digital resources; and
- Flood Risk Information Programs;

### **3.6 Emergency Service Measures**

Although while the underlisted are not typically considered mitigation options, emergency service measures do, in fact, minimize the impacts of flooding on business activities, lives, and property, these actions are, for the sake of human and economic viability, standard available practice in progressive environments—before, during, and post life-threatening incidents. Examples include:

- Hazard Warning Systems;
- Emergency Response Plans;
- Critical Facilities Protection;
- Health and Safety Maintenance; and
- Post Flood Recovery Planning.

## 4 Recommended Actions to Reduce Flood Risk

This Section highlights recommended action plans, framework and timelines to minimize, eliminate, mitigate and manage flood risks in the region. Resources on mitigation suggested in Section 3 of this report are helpful in this regard.<sup>9</sup>

### 4.1 Action Plans

This report recommends a three-phase categorization of the discussions in Section 3 for consideration and implementation in the ND region.<sup>10</sup> While these phases are not mutually exclusive from each other, they include:

1. **Preparation Phase (Prior Flooding Events) – December to April**
  - Prediction of Flooding; and
  - Risk Zone Identification and Mapping.
2. **Prevention Phase (Prior and During Flood Events) – December to October**
  - Early Warning Forecasts and Monitoring Flood Patterns; and
  - Preparation and Deployment of Contingency Plans.
3. **Response and Mitigation Phase (Post Flood Events) – November to February**
  - Damage Assessment;
  - Relief Materials Management; and
  - Document Lessons Learned for Future Use.

#### 4.1.1 Preparation Phase (Prior Flooding Events)

The key components of the preparation phase include:

- **Start Simple with Community-Based Initiatives (CBI)** - Develop flood mitigation guidelines to create awareness and appreciation of responsibilities.
- **Conduct Studies and Research into the Environment** – Use Geographic Imaging Survey Techniques.
- **Chart Drainage Courses** - Locate and chart the routes of interconnecting water courses within drainage basins and note obstructions and other relevant features.
- **Design and Construct Adequate Drainage and Sewerage Schemes** - Provide drainage/sewerage models and appropriate engineering designs (allowing modification of shallow streams into aesthetically appealing navigable channels).
- **Conduct Simulation Studies** – To understand the behavior of up and down rivers and streams during flood events.

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<sup>9</sup> It is critical to understand the importance of location or site-specific needs and challenges. Expert opinion based on proper scientific evaluation and engineering analysis is advised prior to implementing any of these strategies.

<sup>10</sup> The recommendations are sequel to IFICU teleconversations: “Annual and Other Flooding Impact in Ijaw Territory of the Niger Delta” (Ambaiowe, E.C.) in Appendix 1b; “Reactions to the YouTube videos and Flood Management Strategies for Ijaw Communities” (Ambaiowe, D.C.) - Appendix 1c; “IFICU – Way Forward” (Don-Pedro, I.) - Appendix 1d; and *Proposed Matrix on Flood Impact Management*” (B. Okoro) - Appendix 1e.

- **Develop or Adopt Applicable Engineering Best Practices** - Studies and designs may be subjected to scientific and engineering analysis of the best practice.
- **Town and Architectural Planning** - Interface the designs and bring in harmony with town planning and architectural considerations as well as regulations; and even improve or update continuously.
- **Inter and Intra Agencies Cooperation** - Coalescing work done variously by Federal Ministry of Water Resources, Nigeria Hydrological Services Agency (NIHSA), Niger Delta Basin Development Authority (NDBDA), Niger Delta Development Commission (NDDC), Universities, Shell Petroleum Development Company (SPDC) etc. through collaborations would be useful.
- **Government Interfacing** – Review and re-evaluate previous attempts (inclusive of successful, failed or abandoned) on flood/erosion control projects by Federal, States, LGAs, NDDC (OMPADEC is the precursor), etc. to hold people accountable is desirable as looking back is not always a drawback.

#### 4.1.2 Prevention Phase (Prior and During Flood Events)

The key components of the prevention phase include:

- **Early Warning Forecasts and Monitoring Flood Patterns** – While the logistics and the state-of-the-art equipment required for this initiative are capital intensive, ND states must make this important preventative and life-saving investments through intentional collaboration.
- **Preparation and Deployment of Contingency Plans** – As medium-long-term plans, ND states should immediately embark on construction and maintenance of various engineering infrastructure such as continuous land reclamation to create high grounds for communities.

As compatible corollary to short-term action plans, a private-public partnership between government and stakeholders could locate ways and measures of ameliorating the worsening living conditions in communities adversely impacted throughout the flood periods. For example, various orders of governments, stakeholders must expressly collaborate with communities to coordinate and manage this task. The following have been identified as additional focus areas under this recommendation:

- ❖ Coordinate the temporary evacuation of people, livestock, property, etc. to camps specially set-up for this purpose;
- ❖ Coordinate the distribution of essential supplies (food/water, clothing for warmth, lighting, etc.) to displaced people;
- ❖ Supervise code-yellow and code-red preventative healthcare and general hygiene in the camps. Establish mobile clinics on wheels and river crafts. Air ambulance(s) will be a significant advantage;
- ❖ Coordinate and collaborate with humanitarian services (organizations and government Ministries /Departments/ Agencies (MDAs) involved in humanitarian services or vested with disaster management; International Committee of the Red Cross (ICRC), Rotary International, NEMA, SEMA, *et. al.*);

- ❖ Coordinate and collaborate with local communities on flood data gathering through periodic, consistent and accurate flood level markings; from start of rising waters to peaks and eventual receding to normal.<sup>11</sup>
- ❖ Advisory for Infrastructure Construction – Minimum elevations above flooding natural ground levels should be enforced across localities during construction of buildings (Damp Proof Course - DPC), walkways, highways/bridges, electricity transformers and infrastructure for other services.<sup>12</sup>

### 4.1.3 Response and Mitigation Phase (Prior and During Flood Events)

This phase presents the most opportunity for IFICU’s involvement. The key components of the response and mitigation phase include:

- **Damage Assessment** – It is recommended that damages are assessed according a Community Based Initiatives (CBI) framework. Such efforts should be comprehensively collated for technical evaluations, streamlining, computing and publishing of annual economic losses. During damage assessment, mass fumigation and disinfection of homes should be completed at no cost to residents, businesses, or building owners.
- **Relief Materials Management** – Regrettably, coordination of relief materials during both the 2012 and 2018 flood disasters was fraught with shameless non-responsive brazen sharp practices. Very little, never adequate provisions in relief materials ever reached the people who needed them. Overall, governments at the state and federal levels failed to properly assess the needs nor made adequate provisions to meet them. The affected persons in communities were left stranded, callously abandoned by the people who they voted into power as governments.
- **Documenting Lessons Learned** – Layers of effective, excellent, documentation of lessons learned will strengthen knowledge bases and benefit all stake-holders. Technology-driven mechanics are added advantage. This way, the environment becomes more attractive for the thriving of sustainable donor support systems.

## 4.2 Community Focus

The following discussions provide an overview of factors with questions to consider for developing a Community Based Initiative (CBI) program. A CBI program is valuable for identifying and prioritizing possible mitigation actions. Note that the intent is for communities to develop and take ownership of specific approaches based on their needs and challenges. Since there are different mitigation actions that can potentially lessen the impact of floods, identifying specific actions can assist a community decide which options, or combination of options, are appropriate for implementation.

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<sup>11</sup> An uncomplicated way is by mounting measurement staff to read the river stages at strategic points in the communities. It requires very little training and good records will be kept for communal use, which can be integrated into more professionally organized data gathering systems.

<sup>12</sup> Enforcement will be crucially important as failure to comply and utilize information and knowledge always proves expensive—eventually.

#### 4.2.1 Identifying Specific Actions for Communities in the ND Region

There are many ways to identify specific actions most appropriate for a community. Some factors to consider may include the following:

1. **Terrain Characteristics** – Does the terrain of the community present unique challenges (e.g. significant slopes or erosion potential)?
2. **Flood Characteristics** – Are the flood waters affecting the community fast? Are they slow moving? Are there debris associated with the water flow? How deep is the flooding?
3. **Socio-Cultural Acceptability** – Will the mitigation action be acceptable to the public? Does it cause social or cultural problems?
4. **Technical Feasibility** – Is the mitigation action technically feasible (e.g., requirements for building elevation)?
5. **Administrative Feasibility** – Are there administrative capability to implement the mitigation action?
6. **Legal** – Does the mitigation action meet all applicable codes, regulations, and laws? Ideally, public officials have a statutory and socially contractual responsibility to act in ways that seek to eliminate, not create, known or unknown hazards to the populace. It should therefore be part of the legal function of elected officials in the ND region to educate and inform residents in their communities about their rights.
7. **Economic** – Are the mitigation action affordable? Is it eligible under grants or other funding programs? Can it be completed within existing budgets?
8. **Ecological/Environmental** – Does the mitigation action cause adverse impacts on the environment, or can they be mitigated? Is it the most appropriate action among the possible alternatives?

## 5 Conclusions

This report provides all orders of governments, relevant stakeholders, communities, and residents with flood risk information and tools that they can use to increase their resilience to flooding and for better protection. Flood risk is always changing, and there may be other studies, reports, or sources of information available that provide more comprehensive information.

It is only people who are dissatisfied with poor conditions around them, having mass awareness to enthrone a new order and consciously working to achieve a new vision that can produce meaningful results. This awakening appears to have dawned on the Niger-Delta Region; especially the Ijaws. IFICU is leveraging effectively on this concept. However, political will and societal synergy is crucial to enforce actions that will yield ultimate results.

The IFICU - Technical Flood Management Committee has pieced together this report in the hope that it serves a meaningful purpose. It is instructive for the people of the Niger-Delta Region to remember that Isaac Boro's activism and revolution were anchored on flooding and environmental concerns. Please avert your attention to his memoirs contained in the book *"The Twelve-Day Revolution"*.

While this Technical Committee is keen on having responsible community leadership on flood matters, it is equally mindful of the practice of burdening poverty ravaged communities with raising the funds to carry out flood mitigation.

Dredging of the rivers and creeks around flood impacted communities is an imperative. However, any dredging project must be monitored from conception to finish to prevent the usual sharp practices, including nepotism and graft associated with such intervention.

As much as possible, qualified local engineering professionals should be involved in all flood impact mitigating work to build capacity, create wealth locally, and employ and deploy local knowledge to be passed on to future generations of the Niger-Delta.

### 5.1 Next Steps: Investigative Study

Investigations reveal that while there are several rivers (such as Rivers Mayo Kebi, Faro, Donga, Katsina-Ala, Taraba, etc.) which derive their source from the Adamawa Plateau, which empties its water into the River Benue, thus, the River Benue Basin, the only significant flood control structure in the River Benue Basin is the Lagdo Dam—under the ownership and control of Cameroon. Therefore, if these rivers empty into, and essentially contribute to the overflow on the Benue river, it makes sense that dams should be constructed at precise and/or suitable locations—for control or prevention of flooding with the additional benefits of dams.<sup>13</sup>

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<sup>13</sup> The large overflow of water in the River Benue Basin eventually finds its way to cause the flood in the Niger Delta as the mouth to the Atlantic Ocean.



While the governments of Benue and Plateau States have adopted a more aggressive and proactive approaches by pressuring the Federal government into collaboration for construction of structures in place to control the flood, ND governments have not done similarly. Some examples of the achievements these former States in this wise are as follows;

- a) Kashimila dam when completed will take off 30% of the water quantity that would flow into the River Benue Basin.
- b) Construction of drainage/channels and opening up of water channels (catchment area) in parts of Benue State.
- c) Benue government requested the Federal government to construct buffer dams on Rivers Benue and Katsina-Ala as a solution to the perennial flooding along the banks of the two rivers.
- d) Benue government also asked the Federal government to construct mega drainage channels in three major towns of the state to confront the challenge.<sup>14</sup>
- e) Also dredging of the River Benue and Niger would be part of a permanent solution to the flooding.

#### **Solutions:**

Clearly, the most effective flood control measures in the Niger Delta flooding summed up thusly:

- 1) Governments of the respective ND States should collaborate with the governments of Benue, Plateau, Taraba, Adamawa States, etc. Such collaborative efforts will fast-track development via existing projects to lessen or eliminate the burden of reinventing the wheel, including the additional advantage of breaching any delays from Federal government bureaucracy.
- 2) Construction of waterside embankments along towns, villages and settlements with adequate steel and concrete structures which will not damage under erosion.
- 3) ND States should construct catchment channels to control the overflow flood water which will invariably serve as portable water for the ND area if water treatment plants and a network of water distribution are put in place.
- 4) Dredging of the Rivers Benue and the Niger as earlier suggested, including dredging some of their tributaries in the ND due to silt and shallow depth.
- 5) Local governments and community rulers (Kings) and leadership should be encouraged to put in place traditional channels or lakes (oba) which serve as fishing ponds and may also help in the case of perennial floods caused by heavy rainfall.
- 6) Finally, IFICU must immediately fashion out modalities for the creation of a **Pressure Group—right now!** This pressure group will follow up on, interact and interface with all the ND states—as well as the Federal government. And it must not end up being a prototype of any existing Ijaw organization, excepting the Ijaw Professionals Association.

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<sup>14</sup> However, the construction of such channels of flowing water with reservoirs along the channels, in addition to holding off flooding, will serve portable water to all the communities within the States in the area.

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## Additional Resources

1. IFICU - Technical Flood Management Committee Meeting Minutes – [Appendix 2](#).
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## Appendices

**Appendix 1 – Individual Report Submissions**

December 14, 2018

## Technical Flood Management Individual Report on the Niger Delta

By Peter O. Edu



### Introduction:

In my opinion we have approached this 2012 and 2018 flood wrongly. First, the flood was principally caused by the release of water from the Lagdo dam on the River Benue. Though some may argue that without the dam there may still be perennial flooding in the Niger Delta due to six to nine months of rainy season. However, our rains are not the Monsoon type, like in India and Asia, and as such there should be no cause for alarm for the Niger Delta to have the type of floods it had in 2012 and 2018. Also, the lack of record keeping of ecological, environmental and various studies of the Niger Delta Region (that have been there since the early 1960s till date) which could have helped us to collate their studied solutions have deprived us of any meaningful studies.

**Investigative Study:**

Upon some investigation the only significant flood control structure in the River Benue basin is the Lagdo Dam. There are several rivers (such as Rivers Mayo Kebi, Faro, Donga, Katsina-Ala, Taraba and etc.) which takes its source from the Adamawa Plateau that empties its water into the River Benue, thus, the River Benue Basin. Essentially these rivers contribute to the overflow on the Benue river, thus dams are needed at precise or suitable locations to control or prevent flooding. This large overflow of water in the River Benue Basin eventually finds its way to cause the flood in the Niger Delta as the mouth to the Atlantic Ocean.

It is obvious that both Benue and Plateau State governments have been pressuring the federal government in collaboration to put some structures in place to control the flood. Some examples as follows;

- a) Kashimila dam when completed will take off 30% of the water quantity that would flow into the River Benue Basin.
- b) Construction of drainage/ channels, and opening up of water channels (catchment area) in parts of the State (in Benue State).
- c) Benue government requested the Federal government to construct buffer dams on Rivers Benue and Katsina-Ala as a solution to the perennial flooding along the banks of the two rivers.
- d) Benue government also asked the federal govt to construct mega drainage channels in three major towns of the state to confront the challenge. However, in my opinion these channels of flowing water with reservoirs along the channels can serve portable water to all the communities within the States in the area.
- e) Also dredging of the River Benue and Niger would be part of a permanent solution to the flooding.

The Lagdo dam has a substantial hydroelectric power potential of 700MW, and has an installed capacity of 84 MW, but only one turbine of 21 MW is in use. Thus, the dam is completely underused even for flood control because the reservoir is allowed to be filled beyond its use. Thus, "If Lagdo Dam is to serve as a flood control structure, less water would have to be stored in the reservoir behind the dam. The present maximum operating level of the dam, the full supply level, is 216m above sea level. This should be lowered to 208m above sea level and the lowered level should be incorporated into the Memorandum of Understanding between Cameroon and Nigeria." Quoting from a Vanguardngr.com News.

**Solutions:**

In my opinion the most effective way to fight or control the Niger Delta flooding is as follows:

- 1) The Niger Delta States governments must collaborate with the governments of Benue, Plateau, Taraba, Adamawa States and etc. This may be independent of the Federal government or with the federal government inclusive.

- 2) Construction of water side (River side) embankments along towns, villages and settlements with adequate steel and concrete structures that will not damage under erosion.
- 3) The Niger Delta States can also construct catchment channels to control the overflow flood water which will invariably serve as portable water for the Niger Delta area if water treatment plants and a network of water distribution is put in place.
- 4) Dredging of the Rivers Benue and the Niger as suggested above, and including dredging some of its tributaries in the Niger Delta because of silt and shallow depth.
- 5) Local governments and community rulers (Kings) and leadership should be encouraged to put in place traditional channels or lakes (oba) which serve as fishing ponds and also help in the case of perennial floods caused by heavy rainfall.
- 6) We cannot overemphasize the need for a **Pressure Group** to interact with the Bayelsa, Rivers and Delta State governments and leadership as these are of immediate reach to us.

**ANNUAL AND OTHER FLOODING IMPACT IN IJAW TERRITORY OF THE NIGER DELTA**

Author - Engr. Ebieridei Charles Ambaiowei, MNSE.

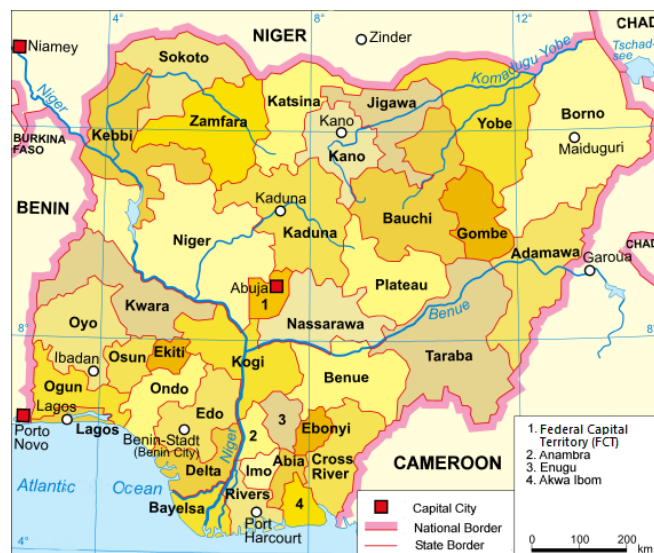
**1.0 INTRODUCTION**

It is apt that we begin with the general physical geographical characteristics of the Niger Delta, an area the Ijaw territory is inscribed or situated, because we are indeed affected by all its known features. For the purpose of this discourse the Ijaw territory spans the coast of the Bight of Biafra, from the Forcados River to the Opobo River and upstream to the Niger tributaries of the Nun and Forcados Rivers. This area is 7,000 Square kilometers with 480 kilometer long stretch of the coast line of Nigeria. The population is 2,798,275 as per census of 1991 by National Population Commission.

**Figure 1: Ten (10) Ethno-linguistic and cultural affinity-based zones of Nigeria**



**Figure 2: Map of the States and FCT of Nigeria**





### **1.1 Knowing the Niger Delta.**

The Niger Delta is the largest wetland in the world with a 70,000 square kilometers area that constitute 7.5% (seven and half percent) of the land mass of Nigeria. Its physical geography consists of a number of ecological zones, viz: sandy, coastal ridge barrier, brackish or saline mangrove, fresh water, permanent and seasoned swamp forest, lowland rain forest. The complex drainage of the area is majorly provided by River Niger, Ase River, Ethiope River and Imo River. The River Niger system is more outstanding and comprises of two major tributaries which end up in the creeks and estuaries characteristics nature of the total flood plain and coastal front of the Delta. It is the other River systems combined that drain the coastal plains to the **West** and **East** of the Niger Delta and merge into the network of tributaries, creeks and estuaries that make up the Delta.

### **1.2 Oversight River Niger and River Benue.**

It is also essential to keep tab, sight and interest on the upstream activities of the River Niger and River Benue since the Niger Delta serves as their receptacle before draining into the Atlantic Ocean.

## **2.0 BACKGROUND:**

Ijaw Flood Impact Coordinating Unit (IFICU) is voluntary and self-help group which congregated in a WhatsApp platform in 2018. It was created by Comrade Rosemary Aken Naingba, President of Ijaw Women Connect (IWC) worldwide.

IFICU focuses efforts and attention on flood impact coordination across Ijaw territory.

Flooding is a natural disaster the Ijaws are prone to and lives with in this environment from time immemorial. Therefore mitigating flooding impact, amongst which are loss of life, damage to property, destruction of crops, loss of livestock, deterioration of health conditions owing to water borne diseases, rapid spread of spilled crude oil, etc is of utmost importance. This intervention or contribution is to the Technical Flood Management Committee set up by IFICU towards providing flooding and its impact literature, solutions and action plans implementation.

### **2.1 Indigenous ethnic people of Niger Delta.**

The IFICU work is essentially Ijaw people oriented. However, brief knowledge of sister ethnic nationalities in the Niger Delta is useful. The indigenous current ethnic population is about 20 million (and their forebears is believed to have lived over 7,000 years) in the true Niger Delta comprising the following 22 nationalities, viz: Afemai, Anang, Aniocha, Bekwara, Benin, Efik, Ejagam, Eleme, Ekpeye, Esan, Etche, Ibibio, Ijaw, Ikwere, Isoko, Itsekiri, Mbembe, Ogoni, Oron, Ukwani, Urhobo and Yakur.

It is further projected that an additional 5 million population of other Nigerians and foreigners are actively in the true Niger Delta due mainly to crude oil/natural gas industry as well as subsidiary activities.

## 2.2 Cognisance of political Niger Delta.

The IFICU's work should both harness regional co-operation and multi-disciplinary approaches. Therefore, it is noteworthy and perhaps worthwhile to further high light the political composition of States in Nigeria under the Niger Delta Development Commission (NDDC).

There are 9 States under the political coverage of NDDC with a total population of 42,636,600 (NPC 2016 projection). I take liberty to outline them and all the ethnic nationalities indigenous to each.

- i. Abia (3,727, 300) - Igbo.
- ii. Akwa-Ibom (5,482,200) - Anang, Ibibio, Ijaw, Oron.
- iii. Bayelsa (2,278,000) - Ijaw, Isoko.
- iv. Cross River (3,866,300)- Bekwara, Efik, Ejagam, Mbembe, Yakur.
- v. Delta (5,663,400)- Aniocha, Ijaw, Isoko, Itsekiri, Ukwani, Urhobo.
- vi. Edo (4,235,600)- Benin, Esan, Ijaw, Ora.
- vii. Imo (5,408,900) - Igbo.
- viii. Ondo (4,671,100)- Ijaw, Yoruba.
- ix. Rivers (7,303,900- Ekpeye, Eleme, Etche, Ijaw, Ikwere, Ogoni.

**Figure 2: Cognisance of political Niger Delta**



## 2.3. Cognisance of networking and regional co-operation.

We all share in the environmental devastations and degradations; thus our showing common concerns as well as presenting a unified front is deemed absolute necessity. Our destinies are tied together and threat to common existence is not imaginary but a reality.

This should give sensitive insights as to the need for 'a brother's keeper' approach as we work, talk and walk the IFICU agenda. Therefore, we need to network and create other linkages as well.

## 3.0 FLOOD CHARACTERIZATION IN IJAW AREAS.

The Niger Delta, majorly the Ijaw territory, is essentially a drainage basin. It drains water into the Atlantic Ocean via natural water bodies bearing massive volumes of water. Thus, prior to

discharge there occurs varied flooding. This is besides the complex operational hydraulics systems of the rivers, streams, channels, e.t.c.

3.1 What is Flood?

I adopt for the purpose of this exercise the depiction by National Geographic the term Flood: Information and facts.

"A flood occurs when water overflows or inundates land that is normally dry. This can happen in a multitude of ways. Most common is when rivers overflow their banks"

3.2 Types of Flood.

These basically are:

- i. Flash Floods.
- ii. Coastal Floods.
- iii. Urban Floods.
- iv. River (or Fluvial) Floods
- v. Ponding (or Pluvial) Floods

All the five types of floods are at interplay and occur in the Ijaw areas. None should be ignored in terms of positive and negative impacts.

3.3 Types of Floods and areas of occurrence (Explanatory Notes)

**Table 1: Annual cycle: weather, seasons and climatic conditions.**

October - November	December - February	March - April	May- September
Early Dry	Core Dry	Early Wet	Core Wet
Scanty rainfall, reduced frequency and intensity with moderate humidity ushering in Core Dry season (Dec. to Feb.) as floods peak and later recede in fresh water bodies such as rivers, streams, lakes, e.t.c. Ground water table/ level peaks too and later begins to drop or reduce with the receding floods.	Mostly sunshine, spartan rainfall (where any), dry soils/grounds (all fully absorbing water) and low humidity. Ground water table/ level and stage in rivers, streams, lakes, e.t.c. are lowest.	Onset of scanty rainfall, frequency and intensity usually erratic and moderate humidity. It serves as early commencement of wet season and a warming to prepare for harvesting farms susceptible to flooding. Thus, early farm harvests are in May and later on in June because the rising levels in fresh water bodies like rivers, streams, lakes, e.t.c. start to gradually overflow their banks. Ground water table/level also rises or increases.	Heavy, intense, frequent and sustained rainfall duration resulting in totally wet conditions with associated thunder storms as well as high velocity winds and high humidity. Flooding and its impact are more pronounced because waters submerge usually dry lands. It represents the most difficult times to cope with, hence the urgency for all kinds of short, medium and long term mitigating measures.

The above table summarizes the annual cycle of prevalent weather, seasons and basic

climatic conditions. Impact assessment during these periods, especially in the Core Wet timeline, concerns us most. Moreover, **rainfall is a major contributory factor in all the types of floods experienced.**

\***Rain** is liquid water in the form of droplets that have condensed from atmospheric water vapour and then become heavy enough to fall under gravity.

3.3.1 Flash Floods results from unusual rainfall. The intense, high velocity torrents of water are fast moving and sweeps everything in their path. In an existing river or stream it attracts little or no notice and may last couple of hours or days.

3.3.2 Coastal Floods results from strong winds or storms that move towards a coast during high tide, thus seawater submerge normally dry low lying land.

3.3.3 Urban Floods results from flash, coastal and river floods submerging built areas faster than available drainage facilities can accommodate and may last for days or weeks.

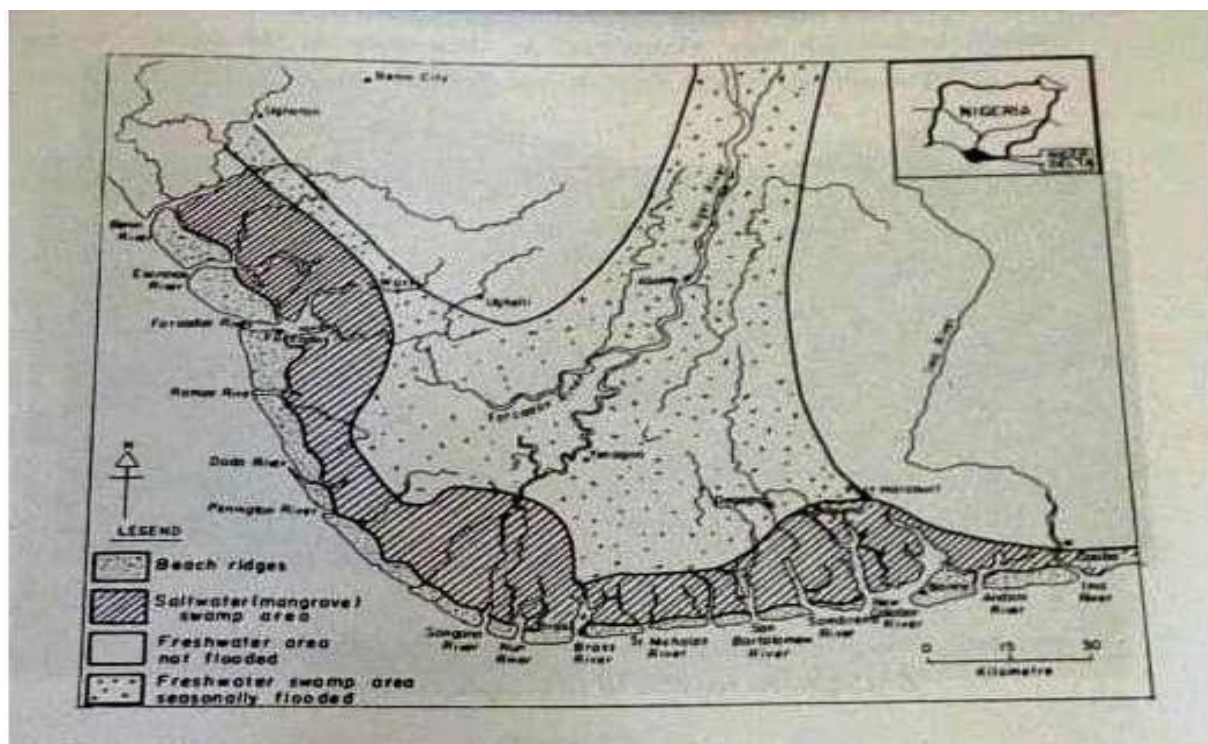
3.3.4 River (or Fluvial) Floods) results from gradual rise of 'river stage' above dry season mean levels to as high as 6 meters within a couple of months (between June to October) in flowing fresh water rivers, streams, etc.

3.3.5 Ponding (or Pluvial) Flood results from combination of Coastal and River (or Fluvial) flooding; hence it can last for days, weeks and months.

3.4 Areas of Floods occurrence.

Reproduced below in Fig. 4 is a general outline of occurrence of floods in the subject area courtesy of 'The Izon of the Niger Delta' (Edited by EJ Alagoa, TN Tamuno and JP Clark).

**Figure 4: Land forms of the Niger Delta**



Ijaw settlements/ communities are basically situated closest to the rivers and Atlantic Ocean. In terms of occurrence of the five types of flood and combinations thereof an analysis using some towns may depict susceptibility.

3.4.1 Flash Floods - occurrence is all over Ijaw territory.

3.4.2 Coastal Floods - notably susceptible and affected are Opobo, Ataba, Bonny, Ke, Brass, Ewoama, Sangana, Agge, Ekeni, Ezetu, koluama, Burutu, Okerenkoko,

3.4.3 Urban Floods - notably susceptible and affected are Yenagoa, Amassoma, Adagbabiri, Oporoma, Odi, Kaiama, Brass, Nembe, Ogbia Town, PH(Marine-base, Borokiri, Tourist Beach/Ndoki waterside, Bundu waterside), Okrika, Abuloma, Amadi-ama, Burutu, Bomadi, Ogulagha, Patani, Warri.

3.4.4 River (or Fluvial) Floods - notably susceptible and affected are Yenagoa, Amassoma, Toru-orua, Odi, Kaiama, Sagbama, Tungbo, Otofani, Oloibiri, Oluasiri, Abua, Ekowe, Oporoma, Ogobiri, Ebeni, Buseni, Bomadi, Patani, Polaku, Sampou,

3.4.5 Ponding (or Pluvial) Floods - notably susceptible and affected are PH, Degema, Buguma, Foropa, Lobia, Otuoke, Ogbia Town.

#### **4.0 FLOODS IMPACT ASSESSMENT**

An examination of generally acknowledged impacts under negative and positive are presented. Community based specifics are referenced where data/evidence is available.

4.1 Negative impacts of Floods.

Negative impacts of flooding affect lives and property and some of these are outlined below.

4.1.1 Temporary displacement.

People are displaced from homes, schools, shops/businesses, offices, etc in all cases of flooding. However, it is the duration of discomfort which varies with the type of flood. It is least under Flash Floods and maximum with the annual River (or Fluvial) Floods. An oscillation between these extremes are recorded during Coastal, Urban and Ponding (or Pluvial) Floods. Such displacements reduce man-hours, utility and economic productivity. These combine to wreak havoc of emotional and psychological trauma on the people.

4.1.2 Damage to property and infrastructure collapse.

Mostly households, schools, shops/offices and properties get damaged because of inability to salvage. This is because of scarce higher grounds. There are also recorded cases of collapse of houses, roadways/bridges, overhead water tanks, etc due to weakened foundations, erosion and other adverse conditions. When roadways/ bridges cut or collapse it impedes commuting and accessibility in and out of surrounding communities. Evacuating agricultural products and other goods/services are also adversely affected. Furthermore, cost of transportation is astronomically hiked and reduces capacity to spend.

4.1.3 Destruction of crops and agricultural lands.

Massively submerged farms result in destruction of crops and/or premature harvesting. This gives rise to losses in financial earnings and/or hunger in the affected areas because of inadequate preservation and storage.

#### 4.1.4 Loss of livestock.

Both animals and fish farming are adversely affected because the facilities and means of keeping them safe as well as protected are overwhelmed. Floods, therefore, hasten the escape and/or death of livestock.

#### 4.1.5 Health hazard.

Deterioration of health conditions heighten due to spread of water borne diseases, unhygienic conditions and contamination of drinking water sources (usually boreholes). These effects linger beyond the flooding periods.

Note also that mixing of decomposing human corpses (recently buried), solid wastes and soak-away/septic tank fluids occur in the environment. In the same vein snakes, reptiles, etc prowl the environment unusually thus posing serious danger.

#### 4.1.6 Shutting the use of certain infrastructure.

For fear of electrocution, for instance, electricity (cables, switches, transformers, generating plants, etc) or sections of highways/ bridges are submerged so become impossible to use. These are temporarily kept out of use on account of safety concerns. Resort to commuting using canoes/ light craft engine boats and generating power by small generator sets take center stage thus constituting high financial costs as well as inconveniences to the people.

#### 4.1.7 Loss of life.

Human life lost is irretrievable. This happens inspite of how well Ijaws are adapted to living around waters. The specific case of a child's death during the 2018 floods at Boubougbene, Delta State, Nigeria is reported. The child, while asleep, rolled off the makeshift elevated bed into the flood water due to lack of preventive railings.

Note that drowning or other forms of accidental death figures during floods are generally low amongst Ijaws perhaps due to well honed swimming skills from childhood. However, indigenes and non indigenes that cannot swim are at serious risks.

#### 4.1.8 Environmental devastations and degradations.

River (or Fluvial) and Ponding (or Pluvial) flooding particularly spread spilled crude oil, soak-away/septic tank fluids, etc faster. In addition decomposing human corpses (buried days or weeks or a month maximum) as well as other carcasses prior or during flooding are unhelpful.

#### 4.1.9 Economic losses.

The combination of negative impacts enumerated in 4.1.1 to 4.1.8 above translate to humongous economic losses. Unfortunately due to neglect of the people by governments at all levels (**Federal, States and LGAs**) no facts based annual audits are done.

#### 4.2 Positive impact of Floods.

During floods, especially the Ponding (or Pluvial) and River (or Fluvial) types, tremendous load of river sediments such as gravel, mud, clay, sand and silt is deposited. It provides manure replenishment over farmlands plus availability of sand and gravels which are mined for construction industry. Furthermore, the increase in depth of waterways is utilized as the



period heavy cargoes are moved into and out of hitherto inaccessible hinter lands.

## 5.0 RECOMMENDED SOLUTIONS.

I attempt providing here a 3-Phase categorization all recommended solutions may fall within.

i. Preparedness Phase ( or before flooding occurs).

- Prediction of Flooding
- Risk zone identification or vulnerable mapping of flooding areas.

ii. Prevention Phase(or before and during the occurrence of Flooding)

- forecasting early warning of flooding
- monitoring flooding
- preparation of contingency plans and deployment to reduce effects

iii. Response and Mitigation Phase (or Post Flooding occurrence acts)

- undertake activities after the Floods occurrence like damage assessment and relief management
- documentation of lessons learned for future benefits

In considering details of these phases the following remarks are useful.

First, the Floods won't stop coming and cannot be stopped from visiting by virtue of any endeavors we undertake.

Second, the flooding control issues cannot be borne, funded and executed by IFICU.

To underpin these assertions I quote from the Inaugural Lecture (1983) by Prof. Dagogo M J Fubara at Rivers State University of Science and Technology.

***"What management and/or politicians do not understand hardly get funded; what they do not fund may never get executed; and ideas which do not get executed, however wonderful, are of no practical utility to mankind"***

### 5.1 Preparedness Phase

The why, when, how and where flooding occur is fairly predictable, regular in pattern and literature on causes as well as solutions are available.

Faulty infrastructure provision exacerbates flooding problems in our communities.

Therefore providing continuous awareness, getting everyone to understand the issues; and attach serious importance to achieve comprehensively scientific/ technological framework on location-specific terms is recommended.

Location-specific data gathering, management and developing measures to mitigate is imperative.

#### 5.1.1 Start simple with Community Based Initiatives (CBI).

We could develop guidelines in this regard to assist communities to mitigate flooding impact.

The local people are a repository of information. There is currently expecting 'manna falling from heaven' attitude that needs to be changed.

#### 5.1.2 Study and research into the environment.

The encapsulated areas can be studied; especially collate and interpret high precision satellite imaging using GIS survey techniques.

#### 5.1.3 Chart drainage courses.

Locate and chart the routes of interconnecting water courses within drainage basins and note obstructions and other relevant features.

#### 5.1.4 Design drainage and sewerage schemes.

Provide drainage/sewerage models and appropriate engineering designs (allowing modification of shallow streams into aesthetically appealing navigable channels).

#### 5.1.5 Simulation studies.

There is need for simulation studies of effects both up/down stream of rivers and streams.

#### 5.1.6 Engineering best practices.

Studies and designs may be subjected to scientific and engineering analysis of the best practice.

#### 5.1.7 Town and architectural planning.

Interface the designs and bring in harmony with town planning and architectural considerations as well as regulations; and even improve or update continuously.

#### 5.1.8 Inter and intra agencies cooperation.

Coalescing work done variously by Federal Ministry of Water Resources, Nigeria Hydrological Services Agency (NIHSA), Niger Delta Basin Development Authority (NDBDA), Niger Delta Development Commission (NDDC), Universities, SPDC etc through collaborations would be useful.

#### 5.1.9 Government interfacing.

Further reviewing attempted but failed or abandoned flood/erosion control projects by Federal, States, LGAs, NDDC (OMPADEC is the precursor), etc to hold people accountable is desirable as looking back is not always a drawback.

Let me say from benefit of experience that current realities may prove that the work done by Netherlands Development Company (NEDECO) in early 1960s for Niger Delta Development Board (NDDDB) is obsolete. Information may be irretrievably lost as it is doubtful the reports were well preserved at NDBDA (NDDDB is the precursor) in Nigeria.

During my service as Honourable Commissioner for Works & Infrastructure in Bayelsa State the organogram for Ministry of Works and Infrastructure (MOWI) was reorganized to establish a Department of River & Coastal Engineering. My short service couldn't bring it to fully operate and follow up has been lacking.

We also made official representations to retrieve from NDBDA the NEDECO reports but yielded no fruit.

I can confirm as well that neither OMPADEC nor NDDC has averted critical attention to the kind of detailed technical surveys/studies required towards addressing control of flooding and mitigating impact of Floods. I doubt there exist a desk responsible for River and Coastal Engineering issues in NDDC.



## 5.2 Prevention Phase

Forecasting early warnings of flooding and monitoring of flooding in modern precise sense are cost intensive. These involves setting up base stations, equipping, manpower, etc so are way beyond the endeavors IFICU pursue because of funding considerations. The best shot, however, is preparation of contingency plans and deployment to reduce effects on our people.

With concerted efforts, for instance, construction and maintenance of various engineering infrastructure and appurtenances; including continuous land reclamation to create high grounds for settlements/ communities are achievable in medium and long terms by governments.

IFICU's efforts will be impactful if geared towards preparation of contingency plans plus deploying same to contain as well as manage the deterioration of living conditions of the people throughout the flooding durations. This leads us to troubleshoot on repetitive short term acts likely to include the following.

### 5.2.1 Temporary Evacuation.

People, livestock, property, etc should be temporarily evacuated to camps specially set-up ahead of the flooding.

### 5.2.2 Supply Essentials.

Ensure supply of essentials to upkeep the displaced people. Essentials may include food/water, clothing for warmth, lighting, etc.

### 5.2.3 Healthcare on code-red.

Adopt code-red preventive healthcare and general hygiene in the camps. Also needed are mobile clinics on wheels and river crafts. Air ambulance(s) on stand-by will be added advantage.

### 5.2.4 Attract Humanitarian Services.

Create links with organizations and government Ministries /Departments/ Agencies (MDAs) involved in humanitarian services or vested with disaster management. International Committee of the Red Cross (ICRC), Rotary International, NEMA, SEMA, et al could be coordinated to operate in the areas during and after the flooding.

### 5.2.5 Local folks flooding data input.

Ensure local folks carry out simple but permanent flood levels markings periodically from start of rising waters to peaks and eventual receding to normal. It could be done by suitably mounting measurement staff to read the river stage at strategic points in the communities. It requires very little training and good records will be kept for communal use and integrates into more professionally organized data gathering.

### 5.2.6 Advisory for infrastructure construction.

Ensure new minimum elevation above flooding natural ground levels are recommended plus adhered to across localities during construction of buildings ( damp proof course -DPC), walkways, highways/bridges, electricity transformers and infrastructure for other services. It is especially important to do this as the failure to utilize information and knowledge proves

expensive. I cite as example the case of the Library Building of Niger Delta University built about 2010 which flooding submerge its DPC. Whereas the DPC of old buildings built in 1972 for Government Secondary School, Amassoma did not get submerged even in 2012 flooding. NDU inherited these structures like the Administration Block, etc. It is the flood records of 1969 at Amassoma (please note Lagdo Dam had not been built) which served as useful guide. I recall swimming in the sitting room of my grandma's house then. Therefore, in building on this site in year 2000 and applying a reasonable factor of safety is reason the 2012 flood waters did not inundate my new home which is at the Amassoma waterfront. Moreover, the markings/video coverage of peak level of flooding (2018) show it is less by 13 inches compared to 2012. I have since 2012 been voluntarily involved in carrying out markings of flooding in Amassoma.

***2012 and 2018 annual River (or Fluvial) Floods pictures and video recordings in Amassoma are available. Annual continuous documentation in various locations is therefore advised.***

However, provided herein in Table 2 are rough statistics of evacuated residential houses, stores/businesses/offices, schools and churches affected by the 2018 annual River (or Fluvial) Floods.

**Table 2: Evacuated buildings (Residential & Shops/Offices/ Businesses in Amassoma Community in 2018 Annual River (or Fluvial) Floods as set out under 3 'Biris'(Quarters)/ 22 'Peles' (or Compounds tagged sub-Amas).**

S/NO	Amassoma	Residential Houses	Stores/Businesses/Offices	Schools	Churches
A.	Alomu Communities				
1.	Sadiemo	92	19	3	-
2.	Ebiladei	92	30	1	1
3.	Agbedi	41	9	1	1
4.	Oporomo	33	11		2
5.	Goin	84	32		6
6.	Ogbopina	84	15	1	3
7.	Ogboebiama	50	10		
8.	Ibenikiri	71	15	2	5
9.	Foro	91	9	1	4
10.	Bietebi	68	19	1	3
11.	Ayaogbo	70	20	5	3
B.	Okpodu Communities				
12.	Efeke	89	20	8	6
13.	Wapere	60	7	3	6
14.	Waduwei	70	11	2	8
15.	Azene	80	13	4	2
16.	Ebitimikondei	60	11	2	5
C.	Ogoni Communities				

## APPENDIX 1B

17.	Okori	70	16	3	2
18.	Oweidei	60	15		5
19.	Ogoun	50	10	1	
20.	Okolobo	60	18	2	5
21.	Adule	70	15	2	5
22.	Ikoki	70	20	2	1

### 5.3 Response and Mitigation Phase

This phase presents the best opportunity for IFICU involvement in assessment of damages, management of relief and documentation of lessons learned as regards flooding through CBI. There exist acute deficiencies in activities required to be carried out under the three identified sub themes.

On assessment of damage, I propose it be done on each community basis through CBI framework, and collated comprehensively for technical evaluations, streamlining, computing and publishing annual economic losses.

During damage assessment, mass fumigation and disinfection of houses can be done for free.

With respect to relief management, it is observed that what is prevalent is undesirable. It is fraught with shameless non responsive, uncoordinated and brazen sharp practices. Very little, never adequate provisions of relief are made by governments yet it gets callously managed to the non satisfaction of the people.

This calls for enthroning a new order where people of proven integrity, selflessness and track records are vested with management of relief and its processes.

Finally, a very effective and factual documentation of lessons learnt for future benefits will strengthen how a case is made to achieve donors' sustainable support.

Kindly reference the Table 2 presentation as buttressing the need for completion of damage assessment in Amassoma and elsewhere affected by the recent flood.

### 6.0 RECOMMENDED ACTION PLANS AND TIMELINES

It is hereby proposed as follows.

- i. Preparedness Phase: December to April.
- ii. Prevention Phase: December to October.
- iii. Response and Mitigation Phase: November to February.

It is advised that IFICU prioritize and fit into the above timelines all issues of advocacy, enlightenment, petitions, fund mobilization, coordination of research/documentation, construction/maintenance of engineering infrastructure/appurtenances, relief operations, etc.

### 7.0 CONCLUSION

It is only people who are dissatisfied with poor conditions around them, having mass awareness to enthrone a new order and consciously working to achieve a new vision that

can produce meaningful results. The awakening appear to have dawned on the Ijaws. IFICU is leveraging effectively on this concept. However, it is political will and societal synergy to enforce actions that will yield ultimate results.

The Technical Flood Management Committee is enjoined to piece together such desired framework. Do not doubt that Isaac Boro's activism and revolution were anchored on flooding and environmental concerns. Please avert your attention to his memoirs contained in the book 'The Twelve-Day Revolution'.

I congratulate you and I hope this paper add some value to the work of the Committee.

## **Reactions to the YouTube Videos: Dr. Doubra C. Ambaiowe**

This summary captures my thoughts and reactions to the YouTube videos, including my response to the specific questions asked.

Holland has solved their flooding problems, and Louisiana is being proactive; why can't the Ijaws/Niger Delta do the same?

I was impressed with the network of advanced defence systems, canals, dunes, levees, dikes and the additional functional measures shown in both YouTube videos. The level of protection shows that control measures can definitely be taken against issues of flooding.

Note that one-half of the Netherlands is flood-prone and about one-quarter is below sea level, so the Dutch can be described as people who have mastered the art of water management. This is evidenced in functional measures and efforts that have turned their habitat into flood control zones.

### **1. How can we bring the imaginations and creativity shown in the videos into the reality of Ijawland and the Niger Delta?**

- We can learn from the Dutch experience and expertise on how to live well with water and also develop a plan that fits our terrain.
  - We can improve the resiliency of coastal habitats that provide important ecosystem services: risk reduction, agricultural and fisheries production, water quality improvement, recreation etc.
  - We can build communities on systems of canals. Note that canals draining, collecting and moving water around are critical to improving resiliency.
  - Use of functional measures such as pervious concrete, and/or porous asphalt are additional functional measures.
  - We can build infrastructure to protect critical economic assets and large, densely populated areas from storm surges.
  - We can start looking into constructing nature defenses – barrier, dunes and wetlands, pumping stations at strategic locations to better withstand disasters.
- See my earlier propositions – attached

All of these can reduce risks to the people and economy.

### **2. What is required to make the above (1) possible?**

- It will take collaboration, consultations, political-willpower, resources and time. I have always maintained that the challenge at hand will be costly due to past negligence. However, we'd be better off if we made these investments now.

### **3. How do we begin (practical steps, please)?**

- We can begin by adopting the “never again” attitude
- Agree on solutions already proposed, and set up a pressure group ASAP.
- Continue to revise strategies on needs basis.

## **PROPOSITIONS FOR ACCEPTABLE AND WORKABLE FLOOD MANAGEMENT STRATEGIES FOR IJAW COMMUNITIES – By Dr. Doubra C. Ambaiowei**

Flooding in our communities is becoming more common and much more of an inconvenience. Protecting our communities against flood risk is a shared responsibility. However, we must be reminded that while the risk of flooding can be reduced, it can never be eliminated. It is anticipated that climate change will result in more frequent and intense weather events, potentially leading to larger floods and extreme drought in the future.

Based on these realities, our approach to the issue should be both proactive and resilient or adaptive. A number of ideas were discussed in our first teleconference meeting. The following discussions details my specific approach based on a framework that integrates risk awareness, preparedness, hazard response and recovery to safety. The strategies proposed will focus on climate change, event forecasting, community relations, infrastructure resiliency, and managing flood risks.

The key objectives I have posed for each focus are outlined below:

- **Climate Change:** Identify how the changing climate may affect how we manage our rivers and surroundings areas, and build our infrastructure;
- **Event Forecasting:** Explore and identify ways to forecast future weather and river flow events to maximize lead times;
- **Community Relations:** Explore and identify ways to relate with our communities on these issues;
- **Infrastructure Resiliency:** Explore and identify ways to make our buildings and roadway infrastructure more resilient to extreme flooding events; and
- **Managing Flood Risks:** Explore and identify steps to reduce the risk of extreme flood events.

The following action items are proposed as part of strategies or approaches to making Niger-Delta/Ijaw communities more resilient to flooding regardless of its source. Each item should be carefully deliberated for feasibility. Note that these propositions can further be categorized into action time frames consisting of immediate, mid-term and long-term focus plans.

### **1. Support communities in managing their flood risk through improved notification, forecasting and preparedness:**

- Pursue common river forecasting platforms with relevant state and federal environmental ministries and parastatal for faster and more accurate information and alerts about future flood events;
- Incorporate lessons learned from 2012 and 2018 floods to enhance communication channels to keep communities informed of conditions that may lead to higher flood risks especially from rivers and water releases;
- Expand the flood risk communication strategy and provide information and tools to empower residents and/or communities to make informed choices to better manage their personal flood risks; and
- Develop programs that support home-owners to implement flood resiliency measures.

**2. Develop options for protecting communities and infrastructures to a higher flood level:**

- Conduct social, economic and environmental analysis to evaluate the need for a minimum flood protection level that can be used for land-use planning and defensive structural protection measures across the Niger Delta. Note that defensive structural protection measures include flood barriers, reservoirs, dikes, pumping stations and sea walls.

**3. Encourage State and Federal Government collaboration on capital works options for water storage, diversion, and increased protection that is inclusive of social, economic and environmental assessment programs and investment plans:**

- Conducting feasibility studies for river diversions;
- Constructing dams and reservoirs; and
- Constructing permanent/temporary flood barriers at strategic locations throughout our communities that are most vulnerable.

**4. Floodplain development and management:**

- Review existing land-use planning documents and develop amendments or new guidelines and policies that will minimize development in floodplains overtime;
- Prepare a time-phased plan to modify structures that constrain river flow during flood events; and
- Prepare a time-phased plan to remove structures from areas with high flood risks, while minimizing the disruptions to affected communities.

**5. Improve understanding of flood risks, present and future:**

- Develop and publish flood inundation maps, and risk maps for public information;
- Encourage collaboration between academia and other partners to develop methods and models that identify groundwater movement in our communities in relation to flood conditions; and
- Develop a comprehensive climate adaptation plan and implementation tools to reduce/eliminate vulnerabilities where possible.

Based on deliberations from the first teleconference meeting, I get a sense that some of these are already a work-in-progress. It would be great to have some leading into such initiatives, so that we can review and even advise alternative points for considerations. Otherwise, our proposed pressure group will have a ton of work to do. Looking at the task at hand, one wishes Nigeria were truly a federated state. We will get it right, God helping.

I look forward to everyone's input.

## **IFICU-Ijaw Flood Impact Coordinating Unit**

### **Controlling Flooding in Ijaw territory and Niger Delta Communities**

#### **INTRO**

##### **Observations-**

Having gone through several studies online on how similarly impacted peoples came to terms with the reality of flooding (the Netherlands and South Korea etc) as well as the presentation provided by Charles Ambaiowei Engr. I suggest we adopt his observations and recommendations made. In addition, augment with workable suggestions by other members which this committee may find useful.

Some members have made clear a preference for community based flood control actions. This presentation differs on that. Our communities are mostly neglected places which people visit occasionally to see aging relatives and for events including burials. They are mostly not thriving, economically self-sustaining entities. Although this financial resource gap can be filled through community driven fund raising, in the face of the larger realities of long established poverty in our communities and huge flood impact funding requirements, our funding drive must extend beyond the communities.

Also, we must guide against the possibility of violent conflict flowing from the destructive impact of the diversion of flood trail from one community to others.

In view of this, we must work to get governments at all levels to live up to their primary responsibilities to the citizens in this and all matters of flood control, community and human development.

Acknowledge the ecological realities of the vast majority of Ijaw communities located in low lying coastal flood plains.

The setup of the Ijaw Flood Impact Coordinating Unit represents an initiative to fill the missing leadership gap in our affairs as a people and a workable structure on which to build our response to the development challenges of the Ijaw people and territory even beyond flood mitigation.

#### **IFICU Work needs to be structured into:**

##### **Immediate Tasks and Goals-**

Collate all reports into one workable document.

I recommend the adoption of much of the document produced by Charles Ambaiowei with some editing.

Recognise the priority to determine the status of our operative platform, in view of the urgency of communications with various stakeholders this group will embark on as soon as possible. This will involve a determination of a properly incorporated body through which our interaction with all stakeholders will be based.



Commencement of communications to all relevant stakeholders among them, the Bayelsa State Government as government of the Ijaw Homeland State. From this connection to other impacted states-Delta, Rivers, Edo, Akwa Ibom, Anambra, Kogi and other States along the Flood trail.

Set up local units of IFICU in all impacted Ijaw communities, perhaps affiliated to Community Development Committee, CDC structures existing in each community. This body will serve as a flood level monitoring platform and other impacts, document all developments related to floods, mitigation, communication with traditional ruler structures, political office holders and other stakeholders in each community.

Importance of setting up committees (Engineering oversight, community outreach, media, legal, fund raising etc) to work on advocacy and awareness building in the communities. This committee should be operational from this December, 2018 to maximise the presence of more community members during the yuletide, and to continue in January 2019 to begin the work necessary to avoid the negligence of the past that led to loss of life, income and property in 2012, 2018 and other years.

Build a framework for working with State, LGAs, NDDC, Ministry of Natural Water Resources, SEMA, NEMA, Ecological Fund, Ministry of Environment, Ministry of Niger Delta, UNEP, UN Water, Red Cross, Médecins San Frontiers etc etc.

Build on existing links to media and Public Interest Journalists and broadcast media.

Employ the massive use of social media to draw attention to the flooding challenges of the Niger Delta.

Set up a website for the IFICU work and employ, pay persons to manage this.

### **Medium term goals**

Recognise the imperative of dredging of rivers and creeks around many communities which have become silted over time. This solution came up in discussions with most knowledgeable persons (including Prof. Dagogo Fubara and Eng. Tonye David-West , GM Niger Delta Basin Development Authority, NDBDA) on flood management.

Before this, the conduct of Environmental Impact Assessment, EIA and constant review of this, payment of compensation to community members affected.

Recognise the ecological realities of each community. For example, Polobubou in Delta state has her flooding issues compounded by an over 40 years old dredging conducted by Chevron which led to the alteration of the ecosystem through the introduction of sea water and massive silting. The community is thus doubly impacted.

The need for EIA studies as a way of life.

### **Long Term Goals**

Draw up a permanent flood impact mitigation plan, to be reviewed over time as the need rises.

In connection with this, draw up contingency plans for the mitigation of the impact of Climate change induced by the release of greenhouse gases (including flooding, the pressure on dams such

as the Lagdo in Cameroun) and the reality of the earth's natural cycle of climate change that occurs every 1000 or so years.

The imperative of dredging of rivers and creeks around many communities which have become silted over time. Before this, the conduct of Environmental Impact Assessment and constant review of this, payment of compensation to community members.

The need for the conduct of EIA studies as integral culture of development.

### **The imperative of a science-based study to scope all Ijaw communities**

#### **SUGGESTIONS FROM ABROAD**

The **ROOM FOR THE RIVER PROJECT** of The Netherlands, that is rooted in realism that embraces the rivers and working with their natural rhythms.

#### **CONCLUSION.**

The technical team can be proactive and effective by being bold to ensure that governments at all levels live up to their responsibility.

The practice of burdening poverty ravaged communities with raising the funds to carry out flood mitigation will not help this cause.

Dredging of the rivers and creeks around flood impacted communities is an imperative. However, any dredging project must be monitored from conception to finish to prevent the usual sharp practices, including nepotism, graft associated with such intervention.

As much as possible, qualified local engineering entities, labour must be involved in all flood impact mitigating work to build capacity, create wealth locally and employ and deploy local knowledge to be passed on to generations of Ijaw people.

**IBIBA DONPEDRO, Ms.**

#### **Refs:**

Eng. Charles Ambaiwei Flood Impact document

[www.google.com](http://www.google.com)-Room for the River (The Netherlands)

[www.google.com](http://www.google.com) Four Rivers Project (South Korea)

DonPedro I. *Out of A bleak Landscape* 2017.

## PROPOSED MATRIX ON FLOOD IMPACT MANAGEMENT – Engr. Ben Okoro

ENTITY	LONG-TERM PLAN (2-10 YEARS)	YEARLY		
		PHASE 1 (December – April)	PHASE 2 (May – October)	PHASE 3 (October – December)
<b>Federal Government (FG)</b>	<p>Deploy modern technology and conduct an environmental survey and mapping of the flood plain of the River Niger and the Niger Delta Region (NDR).</p> <p>Develop a “Flood Plain Master Plan” containing specific engineered solutions to mitigate flooding of the communities along the bank of the River Niger and the NDR.</p> <p>Provide adequate annual budget to fund flood infrastructure work across flood-prone states.</p>		Deploy the National Guard to assist NEMA and the states with logistics and delivery of relief materials in a timely manner.	
<b>National Emergency Management Agency (NEMA)</b>	<p>Establish a fully equipped zonal office in each state within the flood plain for effective emergency response.</p> <p>Procure emergency response equipment, including but not limited to: roll-on/roll-off water crafts, air boats, river boat clinics, and communication gadgets.</p> <p>Collaborate with the state and LGAs on building of permanent IDP camps in flood-prone areas.</p>	<p>Publish the rainfall and flood level data for the prior season.</p> <p>Issue the flood forecasts.</p> <p>Refresh NEMA’s Contingency plans and sensitize the states.</p>	<p>Issue flood alerts and evacuation advisory.</p> <p>Provide relief materials and medical needs to the displaced persons at the IDP Camps.</p>	Provide relief materials and medical needs for resettlement of IDPs at the communities.
<b>State Governments (SG)</b>	Collaboration between governments within the NDR to prod and key into development of a “Flood Plain Master	Monitor and broadcast the NEMA flood forecasts.	Monitor and broadcast the NEMA flood alerts and evacuation advisory.	Gather lessons and impact statistics from each LGA.

## PROPOSED MATRIX ON FLOOD IMPACT MANAGEMENT – Engr. Ben Okoro

ENTITY	LONG-TERM PLAN (2-10 YEARS)	YEARLY		
		PHASE 1 (December – April)	PHASE 2 (May – October)	PHASE 3 (October – December)
	<p>Plan” by the FG. The governments must demonstrate and show commitment to push for implementation.</p> <p>Conduct or commission a study of communities within the flood plain that were not impacted by the flood and implement quick-win solutions that can be replicated in other areas with similar terrain.</p> <p>Fund and build permanent IDP camp(s) in high grounds in each local government area. Must consider hygiene, security and health and warehousing needs.</p> <p>Procure at least 10 air boats per LGA to assist with logistics during the floods.</p> <p>Develop and reinforce adherence to a building code for flood prone areas, including specification of minimum foundation heights above sea level, and standard coastal plain home designs on stilts, etc.</p>	Develop contingency plans (timing and preparation of IDP camps, etc.)	Provide relief materials and medical needs to the displaced persons at the IDP Camps.	Provide materials and medical needs for resettlement of IDPs at the communities.
<b>Local Governments (LG)</b>	<p>Identify high grounds and set up permanent IDP camp(s) in collaboration with the state government.</p> <p>Collaborate with the state government on implementation of quick-win flood prevention solutions based on lessons from non-flooded communities.</p>	<p>Monitor and broadcast the NEMA flood forecasts.</p> <p>Prepare camp(s) in collaboration with the State Government.</p> <p>Setup Camp Management Committee in collaboration with the CDA.</p>	<p>Monitor and broadcast the NEMA flood alerts and evacuation advisory.</p> <p>Coordinate evacuation planning at the LGA level</p>	<p>Coordinate damage assessment and fumigation of homes in the communities with the respective CDA.</p> <p>Gather lessons and impact statistics from each community.</p> <p>Coordinate medical care for the returnees.</p>

## PROPOSED MATRIX ON FLOOD IMPACT MANAGEMENT – Engr. Ben Okoro

ENTITY	LONG-TERM PLAN (2-10 YEARS)	YEARLY		
		PHASE 1 (December – April)	PHASE 2 (May – October)	PHASE 3 (October – December)
<b>Community Residents</b>	Improve flood mitigation awareness.	Discuss the NEMA forecasts with family.  Develop a security and evacuation plan with the family.	Disseminate the NEMA flood alerts and evacuation advisory to family and neighbors.  Evacuate once a call is made by the CDA and LG.	Clean out the house prior to fumigating.  Do not turn on power supply (where available) until the low-level power outlets have dried out.
<b>Intervention Agencies, e.g., NDDC</b>	Collaborate with the federal and state governments and take a leading role on development and implementation of a Flood Plain Master Plan.  Implement quick-win flood prevention solutions based on lessons from non-flooded communities, on a priority basis.		Donate relief material to the IDP camps in the affected areas.	
<b>Local Non-Governmental Organization (NGO)</b>	Disseminate the dangers the NDR faces from flooding to the world.  Seek and disseminate progress on development and implementation of a Flood Plain Master Plan by the FG.	Disseminate the dangers the NDR faces from flooding to the world.  Seek and disseminate progress on development and implementation of a Flood Plain Master Plan by the FG.	Publicize the impact of the flooding to the local and international community, including video and photo shots.  Formally invite the Red Cross and UN for their assistance.  Monitor distribution of relief materials to the displaced persons.  Organize donation and delivery of relief materials to existing camps.  Volunteer members to assist in management of existing camps	Publicize the impact of the flooding to the local and international community, including videos and photo shots.
<b>Corporate Bodies, e.g., IOCs</b>	Be asked to contribute funding to implement a Flood Plain Master Plan when adopted.		Provide relief materials and medical needs to the displaced persons at the IDP Camps.	

**PROPOSED MATRIX ON FLOOD IMPACT MANAGEMENT – Engr. Ben Okoro**

ENTITY	LONG-TERM PLAN (2-10 YEARS)	YEARLY		
		PHASE 1 (December – April)	PHASE 2 (May – October)	PHASE 3 (October – December)
<b>Ijaw National Congress (INC)</b>	<p>Disseminate the dangers the NDR faces from flooding to the world.</p> <p>Monitor and disseminate progress on development and implementation of a Flood Plain Master Plan by the FG.</p> <p>Sensitize the people about implementation of the new building code when adopted.</p>	<p>Disseminate the dangers the NDR faces from flooding to the world.</p> <p>Monitor and disseminate progress on development and implementation of a Flood Plain Master Plan by the FG.</p>	<p>Organize donation and delivery of relief materials to existing camps.</p> <p>Use the Clan Chapters to monitor distribution of relief materials to the displaced persons.</p>	<p>Coordinate with IFICU to collate and publicize the impact of the flooding to the local and international community, including videos and photo shots.</p>
<b>Elected Political Office Holders</b>	<p>Advocate and lobby for the environmental survey and development of a Flood Plain Master Plan for the communities along the bank of the River Niger and the NDR.</p> <p>Lobby for adequate annual budgets to fund flood infrastructure work across flood-prone states and NEMA activities.</p> <p>Monitor progress on development and implementation of a Flood Plain Master Plan by the FG, when adopted.</p>		<p>Provide relief materials and medical needs to the displaced persons at the IDP Camps.</p>	
<b>Ijaw Organizations Worldwide</b>	<p>Disseminate the dangers the NDR faces from flooding to the world.</p> <p>Monitor and disseminate progress on development and implementation of a Flood Plain Master Plan by the FG, when adopted.</p>	<p>Publicize IFICU’s report, including lessons learned for the prior flood event.</p> <p>Disseminate the dangers the NDR faces from flooding to the world.</p> <p>Monitor and disseminate progress on development and implementation of a Flood Plain Master Plan by the FG.</p>	<p>Publicize the impact of the flooding to the local and international community, including videos and photo shots.</p> <p>Formally invite the Red Cross and UN for their assistance.</p> <p>Organize donation and delivery of relief materials to IDP camps through IFICU Volunteer members to assist IFICU in</p>	

**PROPOSED MATRIX ON FLOOD IMPACT MANAGEMENT – Engr. Ben Okoro**

ENTITY	LONG-TERM PLAN (2-10 YEARS)	YEARLY		
		PHASE 1 (December – April)	PHASE 2 (May – October)	PHASE 3 (October – December)
			monitoring and delivering relief materials to IDP camps.	

**Appendix 2 – Meeting Minutes**



## Ijaw Flood Impact Coordinating Unit (IFICU): Technical Committee - Teleconference Meeting Minutes

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**Date:** Saturday, October 27<sup>th</sup>, 2018.

**Time:** 3.15 p.m. to 4.30 p.m. EST (7.15 p.m to 8.30 p.m GMT)

**Location:** Teleconference

Attendee(s)	Absentee(s) – with apologies
Dr. David Olali – Chairman <a href="mailto:adakaboro.resurrection@nigerdelta.org">adakaboro.resurrection@nigerdelta.org</a>	Engr. Charles Ambaiowei <a href="mailto:ambaamba7@yahoo.com">ambaamba7@yahoo.com</a>
Dr. Doubra C. Ambaiowei – Secretary <a href="mailto:ddoubra@gmail.com">ddoubra@gmail.com</a>	Barr. Iniruo Wills <a href="mailto:willsiniruo@yahoo.com">willsiniruo@yahoo.com</a>
Dr. Boston Edogi <a href="mailto:bedogi@yahoo.com">bedogi@yahoo.com</a>	Dr. Ayakeme Whiskey <a href="mailto:ayakswhisky@yahoo.com">ayakswhisky@yahoo.com</a>
Mama Ibiba Don-Pedro <a href="mailto:mydna2016@yahoo.com">mydna2016@yahoo.com</a>	
Engr. Ben Okoro <a href="mailto:Ben4mail@gmail.com">Ben4mail@gmail.com</a>	
Mr. Peter Edu <a href="mailto:peteoedu@yahoo.com">peteoedu@yahoo.com</a>	
Mr. Jenkins Ebiware <a href="mailto:jebiware@gmail.com">jebiware@gmail.com</a>	

### Welcome from Committee Chair, Dr. David Olali

David welcomed everyone to the meeting and conducted round of introductions. All those who were absent with apologies were also acknowledged.

Doubra confirmed that a quorum was deemed to be in-place, and a motion was moved to commence the meeting by Jenkins, seconded by Mama Ibiba. Jenkins also advised all participants of some background rules to assist meaningful deliberations as follows:

- Mute all phones to keep out background noise interference; and
- Respect each other's time by limiting interference while any participant still speaks.

### Flood Causes and Participant's Concerns

David thanked Jenkins, then reiterated the objectives as discussed from the WhatsApp platform. He further described the floods as artificial issue and feels embarrassed considering our enormous resources. He allocated a minute to each participant to give a feel of what they thought were the causes of the floods in our communities.

Mama Ibiba's opening statement were those of concern for a lack of contributions from the Rivers State axis to these discussions. She further stated that the floods of 2012 and 2018 were a result of water releases from the Lagdo Dam, stating that it was important for this committee to

## **Ijaw Flood Impact Coordinating Unit (IFICU): Technical Committee - Teleconference Meeting Minutes**

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consider this in all of its deliberations. She was equally concerned about issues bothering on legitimacy and need for incorporation as a line of guidance for this committee to continue its work.

Jenkins supported Mama Ibiba's concerns but emphasized that we are more of a think-thank that should ideally metamorphose into a smaller group to engage with key stakeholders and other organizations. He also advised of Ambassador Igali's statement which indicated that there has been work-in-progress in the effort to secure our communities from flooding. However, he believes these efforts have either not been implemented or seen to be implemented. He further emphasized that this committee should eventually function as an engagement group to ensure that all progressive efforts are implemented.

David cautioned that issues of incorporation and committee guideline be paused and redirected focus to the meeting agenda.

Peter and Boston buttressed comments made by Mama Ibiba and Jenkins and attributed causative factors to man-made issues – release of waters from the Lagdo dam in particular. Peter also believes that studies and documents specific to our terrain abound as such a pressure group is most important if solution towards implementation is our objective.

Doubra attributed the current effects of flooding to inaction or a lack thereof from previous years. Ben agrees that it is both due to man-made issues and a lack of action. He believes it will continue to happen with current global changes and trends.

### **Why is it important for us to understand/define this problem?**

David posed the above question. Doubra responded saying the current realities of climate change was reason enough for us to find ways to adapt.

Boston noted that for the sake of Ijawland it was important that we seek aggressive actions to contain the problem. Jenkins believes there have been enough calamities resulting from the issue, hence the need for awareness and concrete action plans.

### **Effectiveness of previous reports and role of this committee on promoting execution**

David believes that the issues that are serious to us appear to be a joke to our leaders. He posed a question on effectiveness of previous reports on this issue of flooding and considerations of the risk of this committee(s) recommendation not being implemented. While few contributors believed that there are feasibility reports on engineering our way out of this problem, all agreed that implementing or proof of execution are non-existent.

### **Motion to extend meeting by 15 minutes**

A motion to extend the meeting by 15 minutes was moved by Peter and seconded by Ben. This allowed time to discuss solution to the problem.

### **Solutions**

## **Ijaw Flood Impact Coordinating Unit (IFICU): Technical Committee - Teleconference Meeting Minutes**

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Jenkins advised that creative methods of stakeholder engagement through pressure groups, including proper methods of community education and engagement be used. Peter agrees that this is the way to go.

David threw up a concern about commitment to the cause by members of the pressure group.

Boston advised the need to build sea walls and drainage systems for every ijaw community.

Doubra supports the idea of a pressure group, but cautioned on the need to send only people with credibility. Doubra noted that he already has in writing his thoughts about the solutions from a technical and engineering perspective, and would share with the group after the meeting.

Ben believes the solutions vary and should look at these based on timelines for execution. He advised that all previous studies be revised with solutions defined prior to delegating pressure groups. Mama Ibiba agreed to Ben's position and further advised on the need to pool these studies in order to form a uniform position on the issues. Peter agreed to the suggestion by David to create a portal where all member inputs and other review documents can be accessed by the committee.

Boston advised the need for community heads and youth leaders to be engaged on solutions as well.

David inquired if other Ijaw groups besides the Ijaw Professionals Association (IPA) can be engaged in this effort. Jenkins cautioned that that may not be the way to go at this time.

### **Life of the Technical Committee**

In accordance with the day's discussion, Peter inquired if this committee is intended to become permanent considering that the issues of flooding cannot be resolved in three weeks. Boston moved a motion to extend the life of the committee, and there was unanimous agreement.

***ACTION ITEM: All participant's to share information as discussed.***

***ACTION ITEM: Mama Ibiba volunteered to make calls to source for relevant review documents for the group.***

***ACTION ITEM: David to create a document collation portal for the group.***

### **Next Teleconference Meeting Dates**

<b>Date</b>	<b>Time</b>	<b>Location</b>	<b>Status</b>
October 27	3 p.m - EST (7 p.m – GMT)	Teleconference	<b>Complete</b>
November 10	TBD	Teleconference	

### **Adjournment**

Motion to adjourn was moved by Mama Ibiba, seconded by Ben. David thanked all participants for their input. Meeting was adjourned at 4.30 p.m. (EST).

**Ijaw Flood Impact Coordinating Unit (IFICU):  
Technical Committee - Teleconference Meeting Minutes**

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*Meeting Minutes Prepared by: Committee Secretary, October 27<sup>th</sup>, 2018.*

*Meeting Minutes Reviewed by: Committee Chair, October 28<sup>th</sup>, 2018.*

## Ijaw Flood Impact Coordinating Unit (IFICU): Flood Management Technical Committee – 2<sup>nd</sup> Teleconference Meeting Minutes

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**Date:** Saturday, November 10<sup>th</sup>, 2018.

**Time:** 3.00 p.m. to 4.30 p.m. EST (8.00 p.m. to 9.30 p.m GMT)

**Location:** Teleconference

Attendee(s)	Absent
Dr. David Olali – Chairman <a href="mailto:adakaboro.resurrection@nigerdelta.org">adakaboro.resurrection@nigerdelta.org</a>	Dr. Ayakeme Whiskey <a href="mailto:ayakswhisky@yahoo.com">ayakswhisky@yahoo.com</a>
Dr. Doubra C. Ambaiwei – Secretary <a href="mailto:ddoubra@gmail.com">ddoubra@gmail.com</a>	Engr. Ben Okoro (with apologies) <a href="mailto:Ben4mail@gmail.com">Ben4mail@gmail.com</a>
Dr. Boston Edogi <a href="mailto:bedogi@yahoo.com">bedogi@yahoo.com</a>	
Mama Ibiba Don-Pedro <a href="mailto:mydna2016@yahoo.com">mydna2016@yahoo.com</a>	
Mr. Peter Edu <a href="mailto:peteoedu@yahoo.com">peteoedu@yahoo.com</a>	
Engr. Charles Ambaiwei <a href="mailto:ambaamba7@yahoo.com">ambaamba7@yahoo.com</a>	
Mr. Jenkins Ebiware <a href="mailto:jebiware@gmail.com">jebiware@gmail.com</a>	
Barr. Iniruo Wills <a href="mailto:willsiniruo@yahoo.com">willsiniruo@yahoo.com</a>	

Meeting officially commenced at 3:10 p.m EST (8:10 p.m GMT).

### Welcome from Committee Chair, Dr. David Olali

David welcomed participants; Ben Okoro's excuse absence acknowledged.

Doubra confirmed quorum for meeting to proceed; Boston moved commencement motion, Ibiba seconded.

### Review of Action Items from First Teleconference Meeting

David requested updates on previous meeting's action items.

Doubra confirmed the following submissions:

- Doubra's proposition notes;
- Charles completed and sent-in his solution paper;
- Mama Ibiba's key follow-up update on material sourcing; and
- David's creation of the group's document sharing portal.

Doubra observed that inputs from other participants are critical to information gathering.

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### **General Impressions on the First Teleconference Meeting**

Overall feedbacks on the first and previous meeting minutes were overwhelmingly positive. On the strengths of everyone's satisfaction, the minutes of the First Teleconference Meeting was approved as written.

Doubra, happy with the pace and direction, noted that with consensus to adopt the pressure group approach, his expectations from this 2<sup>nd</sup> meeting is to have the **specific charge for the pressure group addressed** as part of next steps on the technical mandate of the committee.

Jenkins confirmed he had access to the document portal and would follow-up with some specific questions regarding its use in the course of the meeting.

Mama Ibiba revisited the question of legitimacy of the group's mission and operational status, while seeking redress for clarity of purpose and approach in order to manage potential operational conflicts.

### **Survey Link(s) Feedback**

David inquired if everyone had a chance to respond to the survey sent prior to this meeting.

Charles, Mama Ibiba, and Boston all responded to having accessibility challenges.

Doubra and Jenkins confirmed having no troubles with the links and had responded to the survey. Jenkins suggested sending future correspondences of this nature via emails. Doubra confirmed that the survey links were sent by email as well as on the WhatsApp platform. However, current challenges may require alternative means of resolving the issues.

David noted that the surveys were designed to address some of the issues surrounding legitimacy, credibility, identification of roles for member engagement including generation of questionnaire ideas to capture views from other individuals and organizations. David's expectation is to have these data collated statistically and graphically for purposes of advancing this committee's work. He further requested all participants to share anything substantive that can facilitate the task.

***ACTION ITEM: David to consider sending the survey in a word document format that can easily be completed and returned by those having challenges.***

### **Collaborative Needs and Efforts**

Mama Ibiba stressed the need to work under the charge of existing and known platforms such as Ijaw Professionals Association (IPA) and Ijaw Women Connect (IWC). She advised on discussions with Ambassador Igali noting concerns with engaging with ministries and parastatals of governments. Her expectations bother on perception and seriousness of this committee's relationship with the government and ease of getting desired results.

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Boston countered this idea on the concern of effectiveness of these and other existing organizations, and proposed we work independently as a concerned Ijaw group.

Charles intervened – noting that the groups focus is of a technical nature with specific mandate to recommend solutions for flood management in Ijaw communities. He believes we do not need any of the proposed platforms to function nor need to be registered. He further advised on designing a methodology or template that can be passed down to students of tertiary institutions by way of term papers and projects etc., who will provide us with feedback upon which further work can be advanced. He also highlighted references to his paper submission indicating that some of the past documents being sought were non-existent, and advised follow-up considerations with newer bodies suggested by Ambassador Igali. He also noted that the core issues were those of the Ijaw peoples lack of will and purpose to deal with these flood matters.

Doubra, shared Mama Ibiba's concerns with a reminder that this group is commissioned under Ijaw Flood Impact Coordinating Unit (IFICU) platform, as such our operations would be less confusing if we continued to work under its wings. However, it was advised that IFICU has no legal support.

Jenkins noted that we could work with either the IPA or IWC if such approach resolves the concerns of legality, ease of engagement and communication.

Charles advised that this committee should see itself as a sub-group amongst other working groups. The need to collaborate with other groups or committees should therefore be seen as a standard term of reference. Based on specific needs, either IPA, IWC etc., or even individuals can be approached to advance an outcome. We should therefore de-emphasize on the discussion of specific organizations through which public relations will be conveyed.

Boston thinks it is a question of the integrity of our work and the need to avoid any political entanglements and or complications that most of these existing groups may have. He was not opposed to approaching such groups to advance specific outcomes as per suggestion Charles noted.

Peter believes it is premature for us to discuss conveyance and rather concentrate on collating and agreeing on solutions prior to taking up these diversionary concerns.

### **Flood Impact – Issues Arising?**

David inquired on what aspects of lives were affected by the flood.

Charles provided an update as captured in his paper submission – noting negative and positive highlights. Some of these negative impacts include temporary displacement, damage to property and transportation infrastructure resulting in commuting challenges, impact to agricultural

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produces (livestock and fish farming), environmental devastation and degradation, and health deterioration and loss of lives. He notes that all of these constitute economic losses.

David further inquired how the different aspects of environmental devastation can be avoided or addressed.

Charles advised, mobilization of funds and preparation prior to floods arriving. These will constitute contingency arrangements to mitigate spill hazards and ease of deployment by environmental agencies.

### **Motion for Time Extension**

Jenkins moved a motion to extend the discussion by an additional half hour. Charles seconded.

### **Government Culpability?**

David inquired if government could be considered culpable on the current situation. Iniuro affirmed. He referenced the ineffectiveness of an intervening committee set up following the 2012 floods. **He believes this ineffectiveness was in part due to insufficient funding in comparison to the needs assessment.** More importantly, it was the **lack of follow-up** by the Bayelsa State Government (BYSG) with the Dutch group who were commissioned to address some of the environmental concerns and development of a flood master plan. He advised following up with either Mr. Enemor Saniamama and/or the BYSG on the outcome of the dutch findings and recommendations. He also noted that it was imperative to engage with the BYSG on the need for the 2019 budgetary consideration to address the implementation of the dutch report. Specific to strategic approach, Iniuro hinted that an invitation from the BYSG may be extended to IPA to further discuss these concerns. Should that be the case, he is open to having representations from this committee for joint engagement. He also advised taking on a similar approach with the Bayelsa State House of Assembly (BYHA).

Peter sought to know if this Dutch report is proprietary, otherwise getting a hold of it shouldn't be an issue.

Charles intervened, noting that there may be difficulties with obtaining such reports going by the trends. On the other the report itself may be meaningless if the report were based on proposal with no scientific and or experimental support. Where this is the case, local expertise would be more effective with government support in resolving our collective problems. He emphasized letting-be these organizations but focusing on using immediate and simple approaches with community-based initiatives.

For purposes of making progress, Doubra buttressed points made by Charles, advising a separation of roles between the technical and political focus, noting that the latter cannot function without the recommendations from the former.



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Jenkins mentioned the need to discuss community education and awareness campaign strategies as a strong key document to emanate from this committee.

Charles followed-up with some community responsibility initiatives.

***ACTION ITEM: Iniuro to assist with accessing final report of the 2012 flood intervention committee.***

***ACTION ITEM: Access preliminary report of the Dutch Group.***

- ***Mama Ibiba and Iniuro will follow-up with Mr. Enemor Saniama.***
- ***Charles volunteered to follow-up with the Bayelsa State Ministry of Environment and Secretary to Bayelsa State Government.***

### **Next Teleconference Meeting Dates**

<b>Date</b>	<b>Time</b>	<b>Location</b>	<b>Status</b>
October 27	3 p.m - EST (7 p.m – GMT)	Teleconference	<b>Complete</b>
November 10	3 p.m - EST (8 p.m – GMT)	Teleconference	<b>Complete</b>
November 24	TBD	Teleconference	

### **Adjournment**

Motion to adjourn was moved by Iniuro, seconded by Charles. David thanked all participants for their input. Meeting was adjourned at 4.30 p.m. (EST).

***Meeting Minutes Prepared by: Committee Secretary, November 10<sup>th</sup>, 2018.***

***Meeting Minutes Reviewed by: Committee Chair, November 11<sup>th</sup>, 2018.***

## Ijaw Flood Impact Coordinating Unit (IFICU): Flood Management Technical Committee – 3<sup>rd</sup> Teleconference Meeting Minutes

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**Date:** Saturday, November 24<sup>th</sup>, 2018.

**Time:** 3.00 p.m. to 4.30 p.m. EST (8.00 p.m. to 9.30 p.m GMT)

**Location:** Teleconference

Attendee(s)	Absent
Dr. David Olali – Chairman <a href="mailto:adakaboro.resurrection@nigerdelta.org">adakaboro.resurrection@nigerdelta.org</a>	Dr. Ayakeme Whiskey (with apologies) <a href="mailto:ayakswhisky@yahoo.com">ayakswhisky@yahoo.com</a>
Dr. Doubra C. Ambaiwei – Secretary <a href="mailto:ddoubra@gmail.com">ddoubra@gmail.com</a>	Barr. Iniruo Wills <a href="mailto:willsiniruo@yahoo.com">willsiniruo@yahoo.com</a>
Mr. Peter Edu <a href="mailto:peteodu@yahoo.com">peteodu@yahoo.com</a>	Dr. Boston Edogi (with apologies) <a href="mailto:bedogi@yahoo.com">bedogi@yahoo.com</a>
Engr. Ben Okoro <a href="mailto:Ben4mail@gmail.com">Ben4mail@gmail.com</a>	Mama Ibiba Don-Pedro (with apologies) <a href="mailto:mydna2016@yahoo.com">mydna2016@yahoo.com</a>
Engr. Charles Ambaiwei <a href="mailto:ambaamba7@yahoo.com">ambaamba7@yahoo.com</a>	

Meeting officially commenced at 3:23 p.m. EST (8:23 p.m GMT).

### Welcome / Confirmation of Quorum

David welcomed participants. Doubra confirmed quorum for meeting to proceed.

### Feedback Agenda:

- a. **Prior Meetings** – Opinions were sought on impressions from all previous meeting. General feedback suggests good progress. Charles stressed the need to de-emphasize on government actions and return focus to community based strategies.
- b. **Assignments** – General feedback suggests no progress on expected deliverables. Charles advised that a new meeting schedule with the Bayelsa State Government (SSG) is anticipated in the coming weeks. David advised that Iniuro would revert with his findings. David further stressed the importance of completing the previous surveys, and encouraged all members who haven't responded to do so.
- c. **Summary Actionable Conversations Around YouTube Videos** – Lessons to be learned from the YouTube videos were discussed at length. While all participants made various reactions stretching from the need to master the art of living with water, like the Dutch, to specific government, community and individual interventions. There was unanimous agreement to detail out strategies that communities can do to help their respective situations with flood risks.

**RECOMMENDATION:** David recommended that Charles and Ben take leadership with developing community-based solutions to tackle the floods.

## **Ijaw Flood Impact Coordinating Unit (IFICU): Flood Management Technical Committee – 3<sup>rd</sup> Teleconference Meeting Minutes**

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### **Final Reports**

David stressed the need for each member to submit a written summary report (not exceeding 5 pages) of their positions on all that has been discussed regarding the committee's task and also provide acceptable and workable flood management strategies for ijaw communities. He notes that this is important for collating the final report.

***ACTION ITEM: Submission of written summary report (not exceeding 5 pages) – By All. Due Date is December 8<sup>th</sup>.***

David also advised that the final report will address the subject of leadership philosophy, since the discussions so far points to the fact that a lack of leadership and general negligence are the major reasons we continue to struggle with problems of this nature. The other aspects of the report will address the immediate concerns and intervention strategies.

### **Next Teleconference Meeting Dates**

<b>Date</b>	<b>Time</b>	<b>Location</b>	<b>Status</b>
October 27	3 p.m - EST (7 p.m – GMT)	Teleconference	<b>Complete</b>
November 10	3 p.m - EST (8 p.m – GMT)	Teleconference	<b>Complete</b>
November 24	3 p.m - EST (8 p.m – GMT)	Teleconference	<b>Complete</b>
December 15	TBD	Teleconference	

### **Adjournment**

Motion to adjourn was moved by Peter, seconded by Ben. David thanked all participants for their input. Meeting was adjourned at 4.30 p.m. (EST).

***Meeting Minutes Prepared by: Committee Secretary, November 25<sup>th</sup>, 2018.***

***Meeting Minutes Reviewed by: Committee Chair, November 26<sup>th</sup>, 2018.***

**Appendix 3 – Statement (Ijaw Professionals Association)**



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Ijaw Professionals Association Statement on Environmental Emergencies in the

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Niger Delta, Nigeria

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## IPA Statement on Environmental Emergencies in the Niger Delta

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### Address:

Elastra Place No 66 Sani Abacha Expressway

Yenagoa, Bayelsa State

Tel: 08135329845 Email: [Ijawprofessionals@gmail.com](mailto:Ijawprofessionals@gmail.com)

1 October, 2018

### **Ijaw Professionals Association Statement on Environmental Emergencies in Ijaw homeland of Nigeria**

The Ijaw Professionals Association (IPA), Homeland Chapter – covering Rivers, Bayelsa and Delta States – rose from its general meeting on Sunday the 30th of September 2018 with a unanimous resolution to sound an alarm on the ongoing multiple ecological emergencies and humanitarian crises

threatening the continued existence of hundreds of communities across the Ijaw Nation Homeland in Rivers, Bayelsa and Delta States in particular and the Niger Delta region in general.

This call goes to the Federal Government of Nigeria; the International Community (particularly the United Nations Environment Programme and World Health Organization); the Rivers, Bayelsa and Delta States' Governments; the development and donor community; the Niger Delta Development Commission; concerned corporate organizations; the national and international media, and all humanitarian agencies, to rescue the Ijaw populations and neighbouring communities from the following present threats:

The massive 2018 floods ravaging our communities in Delta, Bayelsa and Rivers States particularly, causing the current displacement of hundreds of thousands of dwellers, with no shelters, food, water, medication and other human necessities, and the fear of an epidemic of diseases that may spread beyond national and international borders.

The warning issued a few days ago by the National Space Research and Development Agency about impending earthquakes in 5 states, including Bayelsa State, especially around the petroleum producing communities of Igbogene, Biseni etc, thus adding another troubling dimension to the

mortal cocktail of environmental hazards faced by the Ijaws and the Niger Delta peoples.

III. The rain of toxic soot (black particulate matter) in and around Rivers State that has continued completely unchecked and unabated for over two years now, leaving the entire population increasingly at the risk of cancer and other terminal or debilitating diseases.

The continued menace of daily hydrocarbon pollution of our communities, waters and forests in these states, with grossly ineffective regulation or control for sixty years and counting.

## THE FLOODS THIS TIME

3. While we commend the selfless and courageous efforts of the Ijaw Flood Control Unit (IFCU) Ijaw Women Connect (IWC), Ijaw Youths Development Association (IYDA) and various individuals and community based organizations that have intervened in the last two weeks with their meagre resources to mobilize facilities and coordinate community self-help in the face of gross neglect by local, state and federal governments, we call on these governments to immediately swing into action to provide adequate social relief (shelter, healthcare, food, water, hygiene, etc) and effective short, medium and long term measures for flood and other ecological control and mitigation.

4. We express the utter disappointment of the Ijaw people that, despite the heavy human casualties and social consequences from previous occurrences like the 1999 flood, the catastrophic 2012 deluge, the annual warnings by NIMET (Nigerian Meteorological Agency) and NIHSA (Nigerian Hydrological Surveys Agency) since 2013, recurrent recommendations and reports by relevant authorities and government committees, and the several months of warnings by these agencies in 2018, neither the Federal Government nor any of our state governments took any credible action to protect our vulnerable communities from the foreseeable floods and only sparingly resort to fire brigade and cosmetic responses after populations are displaced and long public outcry.

5. We condemn the Federal Government's typical attitude of burying its head in the sand whenever Ijaw and Niger Delta communities are affected by ecological disasters and the discrimination against our communities reflected in the difference between how much and how fast the Nigerian Emergency Management Agency (NEMA) responds to emergencies in other parts of the country and how little and slowly it responds to disasters in our homeland.

We equally condemn the utter neglect of the environment sector by state governments in the Niger Delta and the Niger Development Commission (NDDC). These governments and NDDC receive billions of dollars (hundreds of billions of



Naira) every year since 1999 by way of the 13% petroleum derivation funds, the statutory NDDC Fund and the Ecological Fund, mostly for the precise reason of protecting the advertized coastal terrain of the core Niger Delta. Yet, they are culpable for the near-zero budget provisioning for environmental exigencies in the region, whilst obsessed instead with the award of contracts for physical projects.

7. We welcome the action of the Bayelsa State Government in setting up a committee to assess and respond to the damage being caused by the floods in the state. We however appeal to the State Government to do far much more, so our communities can avoid the same fate in the event of the floods next time.

## REQUIRED ACTIONS

8.. We therefore call for the following actions:

### BY THE FEDERAL GOVERNMENT (PRESIDENT OF NIGERIA)

Direct NEMA to immediately deploy adequate relief supplies, shelters and services to all flood affected and threatened communities in the Niger Delta region.

Declare a state of environmental emergency in the coastal states of the Niger Delta and other flood-affected states, and mobilize all necessary men and materials, including private sector personnel and facilities, to deal with the situation

within the ambits of international humanitarian best practice and law.

III. Direct the Ecological Fund Office, NDDC, the Federal Ministry of Water Resources and the Federal Ministry of Environment to work in collaboration with the concerned state governments to URGENTLY commission an integrated ecological and water resources management masterplan, backed by clear implementation timelines, a credible monitoring and evaluation framework, dedicated funding, and sovereign/World Bank guarantees for service providers.

Direct and adequately fund the Nigerian Geological Surveys Agency to commission or conduct in consultation with concerned state governments a thorough study to monitor and predict earthquake flash points and adequately prepare to avert or deal with any event or risk of earthquakes and tremors, to avoid the national threat and shame of being caught napping as with the recurrent flood disasters.

Promptly release all the held-up funds due to Bayelsa State and other affected states from the Ecological Fund, and avoid any politicization or discrimination in this humanitarian emergency.

BY THE DELTA, BAYELSA AND RIVERS STATE GOVERNMENTS

Support and cooperate with the IWC and IYDA to boost the efforts, resources and impact of the Ijaw Flood Control Unit.

Demonstrate that charity begins at home by equipping, ADEQUATELY FUNDING and deploying the respective State Emergency Management Agencies and Ministries of Environment to respond robustly to the scandalous humanitarian crises besetting our flood-ravaged communities.

III. Work with the States Houses of Assembly to present and pass a supplementary budget for the purpose, and declare and implement a constructive state of environmental emergency, as amply allowed under the Constitution of Nigeria.

Enact laws to establish and equip State Ecological Management Boards for effective protection, enhancement and economic beneficiation of the states' ecological terrain and resources.

C. BY THE DEVELOPMENT, HUMANITARIAN, DONOR AND PRIVATE SECTORS (INCLUDING RED CROSS)

Urgently come to the aid of affected communities with medical support and other forms of emergency aid, and pay special attention to vulnerable persons: the aged, children, physically challenged persons, and women.

D. BY THE MINISTER OF STATE FOR PETROLEUM (DR IBE KACHIKWU), RIVERS STATE GOVERNOR (NYESOM WIKE), MINISTER OF ENVIRONMENT AND NOSDRA

Take action NOW to stop the toxic soot rain on Port Harcourt and environs, caused by the formal and rogue petroleum operators, save our peoples' lives and stop the blame-trading game.

E. BY IJAW AND NIGER DELTA SENATORS AND FEDERAL REPRESENTATIVES

Be alive to your electoral mandates and actively work to ensure that respective federal and state authorities implement the recommendations made above.

BY THE NATIONAL AND INTERNATIONAL MEDIA

Help our devastated communities by giving maximum local and international media coverage to the current floods, the threat of earthquakes and other present ecological disasters ravaging the communities, with attendant humanitarian crises.

Signed:

Iniruo Wills

Stella Alaere

Raine

President, Homeland Chapter  
Homeland Chapter

Vice President ,

(Rivers, Bayelsa and Delta States)

Marie-Therese Teibowei

## Publicity Secretary

View picture gallery from the flooding disaster.

Photos: courtesy of Ijaw Flood Control Unit

[View picture gallery from the flooding disaster.](#)

Photos: courtesy of **Ijaw Flood Control Unit**



