

INSTITUTIONAL APPROACH TO FLOOD DISASTER MANAGEMENT IN NIGERIA: NEED FOR A PREPAREDNESS PLAN

ABSTRACT

The failure of the country's intervention strategies to satisfactorily ameliorate the sufferings of flood victims and speed-up the recovery processes justify the need for the adoption of a more efficient and innovative response plan to tackle flood emergency conditions in Nigeria. Going through the history of institutional response arrangements during flood episodes, this paper discovered the absence of well-articulated, organized institutional structure to co-ordinate response activities during emergency conditions. Existing response procedures were found to be adhoc, ineffective and poorly coordinated notwithstanding the plethora of agencies involved. The paper however, recognized the fact that the Lagos state government has already developed a preparedness plan to assist all stakeholders, including those living in flood-prone areas, to anticipate/ implement recovery measures speedily in order to reduce flood damage potentials. Using Lagos as a case study, the value of a preparedness plan is appreciated, and its centrality in flood disaster management highlighted. The paper therefore, calls on the federal and other state governments in Nigeria to follow the footsteps of Lagos state government by developing flood disaster management preparedness plans. This will enhance their ability to develop and speedily implement effective response and recovery measures. Options for developing such response plans were advanced

Keywords: *Flooding, Government, Mitigation, Prior planning, Flood disaster management*

INTRODUCTION

Institutional approach, as used in this paper refers, to government response procedures, policies, regulations, guidelines as well as to government agencies engaged in planning and managing flood emergency conditions or in helping victims to cope and recover speedily from extreme flood events. Flooding is a localized hazard that generally results from moderate to large climatologic events such as intense rainfall, snowmelt, and high tides (Smith and Ward, 1998). Excessively heavy and/or prolonged rainstorm is the commonest direct cause of flooding in the world (Reddy, 1986; Oyegun, 2001). In the temperate region where snow fall accumulates, substantial flooding occurs during periods of snowmelt usually in spring and early summer. (Omang, 1992). In urban areas, flooding is induced by a variety of factors such as inadequate drainage, incompatible land-use practices, weak control mechanism and high concentration of impervious surfaces which lead to remarkable increases in the volumes of runoff even at the

instance of a little downpour of a short duration (Lazaro, 1990; Adelekan, 2010). Flooding, may also result from deforestation, blockage of river channels and the collapse of dam walls (Adewale et al, 2010).

In Nigeria, flooding is the most frequent and most widespread natural hazard accounting for about one-third of all disasters arising from geophysical hazards and adversely affecting more people than any other natural hazard (Adebayo and Oruonye, 2013). Flood disasters according to Obeta (2009) accounted for about 38% of all the federally declared natural disasters between 1995 and 2005 in Nigeria. The 2012 flood disaster in Nigeria adversely affected more people in one year than the combined number of all the people affected by other natural hazards, including soil erosion between 2005 and 2010 (Hassan and Tokula, 2013). This dominance is not surprising since the overtopping of the natural boundaries of rivers together with the submergence of the low-lying coastal areas, especially along the Lagos –Ibadan, Benin- Port-Harcourt and Calabar axis, is a more frequent occurrence when compared with the incidence of other hazards such as drought, soil erosion, earthquake and landslide.

In many parts of Nigeria, flooding continue to be an increasing problem, catching individuals and communities by surprise in a repeatedly exasperating way and causing disruption of social activities, damage of infrastructure and even death of people and livestock (Ayoade 1985; Okeke, 2006). For instance, many states are repeatedly affected by the hazards of flooding arising from climatic, anthropogenic and basin factors. In 2003, severe flooding resulting from dam failure submerged farmlands in Zamfara state (Anih, 2004). The dam, following prolonged erosion, inadequate maintenance and weak construction burst its walls and sacked the floodplain occupants of Ka River Valley. In Taraba State the extreme flood which occurred in October 2012 affected 111,255 persons (Nkeki, Henah and Ojeh, 2013). About 28,511 persons were internally displaced with 29 internally displaced person (IDPs) camps in different parts of the state. The floods also destroyed about 83,722 farmlands and 11,178 houses. The flood was so much that the Lagdo dam which was constructed on the River Benue in the republic of Cameroon could not control it. Consequently, the dam had to be opened to release some water from the excess impoundment that is capable of collapsing the dam. The release of water from the Lagdo dam upstream of the River Benue led to the flooding of the entire length and breadth of the downstream catchment of the basin. All the settlements (both rural communities and townships) along the River Benue were flooded (Adebayo and Oruonye, 2013). In southern urban and coastal areas in Nigeria flooding continue to pose a major risk to many of the inhabitants of the low-lying coastal areas; especially on the Lagos-Ibadan-Warri-Port-Harcourt and Calabar axis (Adebayo and Bashir, 2005).

The repeated occurrence of catastrophic flood episodes nation-wide, particularly in southern and urban areas in Nigeria, justifies the need for the development and implementation of an efficient preparedness plan for managing flood disaster in the country. A preparedness plan consists of phases covering pre-flood and post flood disaster activities. (Akintola and Ikwuyatum, 2012) The former includes prevention, preparedness and mitigation while the latter consists of emergency response (rescue and relief), rehabilitation and recovery (reconstructions), Prior emergency

planning is an effective strategy for flood control and management (Colosimo and Wilcock, 2007). Prior flood emergency planning assists floodplain occupants and other stakeholders to respond more effectively to flood episodes (Areola, 1998). It eliminates the implementation of hastily prepared assessment and response procedures, which, characteristically tend to be ineffective, poorly coordinated, unsustainable and wasteful. Given this scenario, therefore, the objectives of this paper are to briefly review:

1. Reoccurring flood disasters in Nigeria
2. The institutional approach to flood disaster management in Nigeria and highlight the gaps
3. The preparedness plan for flood disaster management developed by Lagos state government with a view to seeing whether similar plan could be adopted at national and state levels.

REVIEW OF REOCCURRING FLOOD DISASTERS IN NIGERIA

Flooding is the most threatening and devastating agent of the Nigerian environment (Hassan and Tokula, 2013). Nigeria experiences both fluvial and coastal flooding (Abaje and Giwa, 2008). Fluvial flooding occurs along the floodplains lying adjacent to the numerous rivers crisis-crossing the country (Iloje, 2004). Majority of the most severe flood hazards experienced in Nigeria are fluvial. Several states such as Adamawa, Sokoto, Kebbi, Zamfara, Plateau, Taraba, Bornu, Ogun, Ebonyi, Cross-River, Delta and Kaduna States have been affected, often repeatedly (Ologunorisa and Adejumo, 2005). The Kaduna flood disaster of October 2006, which was partly caused by dam collapse, claimed over 100,000 lives. This the highest number of deaths so far recorded in a single flood event in Nigeria (Obeta, 2009). The 2012 flood disaster which affected over 23 states in Nigeria was described as the most devastating in the last 40 years (Adebayo and Oruonye, 2013). The flood submerged houses, transportations routes, farms and markets. About 1.3 million people were displaced and 431 people lost their lives nationwide (Adebayo and Oruonye, 2013).

Coastal flooding along the low-lying coastal areas in the south is also widespread (Jeje, 2010; Oyegun, 2001; and Iloje, 2004). Urban floods, like other disasters, are hazards which occur frequently in Nigeria due to high rate of urbanization, rapid population growth and high degree of imperviousness in urban areas (Abaje and Giwa 2008). Table 1 summarizes the characteristics of some major flood episodes in Nigeria between 2000 and 2012.

Table 1: Spatial distribution of Disastrous Floods in Nigeria (2000-2012)

S/N	Year	Name of affected area	Number of L.G.As Affected	Date (month/year)	Type of Flood	Recorded Impacts or Effects
1	2000	Ibaji-Gurara River (Kogi State)	1	August/September 2000	Flash	Over 150,000 persons rendered homeless
2	2000	River Katisina-Ala (Benue State)	2	September/October 2001	fluvial	Several farm lands and crops were submerged

3	2001	River Pai (Tarab State)	NA	September 2000	Flash	Thousands of people were rendered homeless
4	2002	No extreme flood was recorded in Nigeria				
5	2003	Ebonyi River and Cross River (Ebony and Cross River State)	3	September 2003	fluvial	Farms, houses and roads were washed away.
6	2003	Kubuwa steam (FCT Abuja Sub Urb)	1	September 2003	Urban	Vehicle & houses submerged
7	200	Kaduna River (Kaduna State)	4	October 2003	Flash	About 100;000 People Were Drowned (Worst Flood Event In Nigerian History)
8	2004	River Gongola (Gombe State)	NA	October 2004	fluvial	20 people died
9	2003	Epe	NA	September 2003	Coastal	Houses, vehicles etc submerged
10	2005	No extreme flood disaster was recorded in Nigeria				
11	2006	Ogun river (Lagos and Ogun States)	4	June 30 th 2006	Urban	Over 20 settlements lying close to Ogun river were deserted
12	2006	Zamfara River (Zamfara & Kebbi State)	NA	October 2006	fluvial	Farmlands, houses, roads and culverts were washed away
13	2007	Sokoto & Rima River (Sokoto State)	2	September 5 th 2007	fluvial	500 people were rendered homeless
14	2007	Sokoto river (Kebbi State)	NA	August 28, 2007	fluvial	3000 people rendered homeless; 300 house submerged (Dakingari village, worst affected)
15	2007	Ngadda River (Borno State)	NA	October, 2007	Flash	21 villages sacked by the flood water
16	2007	Wuse River (Plateau States)	5	October, 2007	Flash	47 persons died 200 settlements, washed away (worst in 30 years)
17	2007	Shasha River (Lagos States)	2	Thursday, August 9 th 2007	Flash	Vehicles, houses farmlands & roads were destroyed
18	2009	Benin and Enviros	13	August 14 th 2009	Urban	Damaged urban infrastructure and displaced people
19	2011	Ibadan and Enviros	11	August 26 th 2011	Urban	Damage of urban infrastructure (roads, bridges, houses, schools, markets) death of 8 persons
20	2012	Niger-Benue trough	22 (states)	September 2012	Fluvial	Damaged farms, houses, roads, and displaced millions of people about 431 persons were killed by flood water

105 Sources:

- (1) Erosion, Flood and Coastal Zone Department of the Federal Ministry of the Environment, Abuja (For Nos 1-18)
- (2) Agbola et al (2012) (for Nos 18-19) Drainage Department of the Lagos State Ministry of the Environment
- (3) Adebayo and Oruonye (2013) (for Nos 20)
- (4) NA = Not Available

CURRENT INSTITUTIONAL APPROACH TO FLOOD DISASTER MANAGEMENT IN NIGERIA

Prior to 1960s, response to flood disaster conditions in Nigeria was an exclusive preserve of private individuals and groups in affected areas (Obeta, 2009). There was no specific, well-formulated institutional response procedure for tackling flood episodes. The federal government's pioneer intervention agency came into being during the First, Second and Third National Development Plans of 1962-68, 1970-74 and 1975-80 respectively, through the establishment of the federal and state ministries of works (Ibetoye, 2007). The Natural Disaster Department of these ministries were mandated to create awareness among the citizenry on flood and associated hazards and to develop sound response strategies to combat flood events through properly cost programme of adjustment, abatements and protection (Kolawole and Olayemi, 2011). In addition, these agencies were mandated to identify, seek and acquire the necessary data needed to combat flood and associated natural disasters (Anih, 2004). These agencies assisted greatly in identifying and characterizing flood-prone areas in Nigeria. They designed and developed weak drainage channels (especially in urban areas), diversion channels and dams to store surface runoff. These structures helped to reduce flood damage potentials in various parts of Nigeria (Ibitoye, 2007). In 1988, the Federal Environmental Protection Agency (FEPA) was established as a unit in the Federal Ministry of Works and Housing. FEPA was mandated to develop policies and programmes which can secure Nigeria from the negative impacts of ecological disasters (Obeta, 2009).

In 1999, the Federal Ministry of Environment was established. The ministry was, among other things, mandated to assess the flooding potentials of watersheds across the country as well as to determine, design, develop and/or authorize the development of appropriate flood mitigation measures in these watersheds (Kolawole et al, 2011). The Flood, Erosion and Coastal Zone Department of the ministry categorized flood-prone areas in Nigeria into three, namely:

1. The low lying coastal areas
2. The Niger Benue trough and
3. Urban and built-up areas stretching from Lagos through Ibadan, Benin, Warri, Port-Harcourt to Calabar (see fig. 1.)

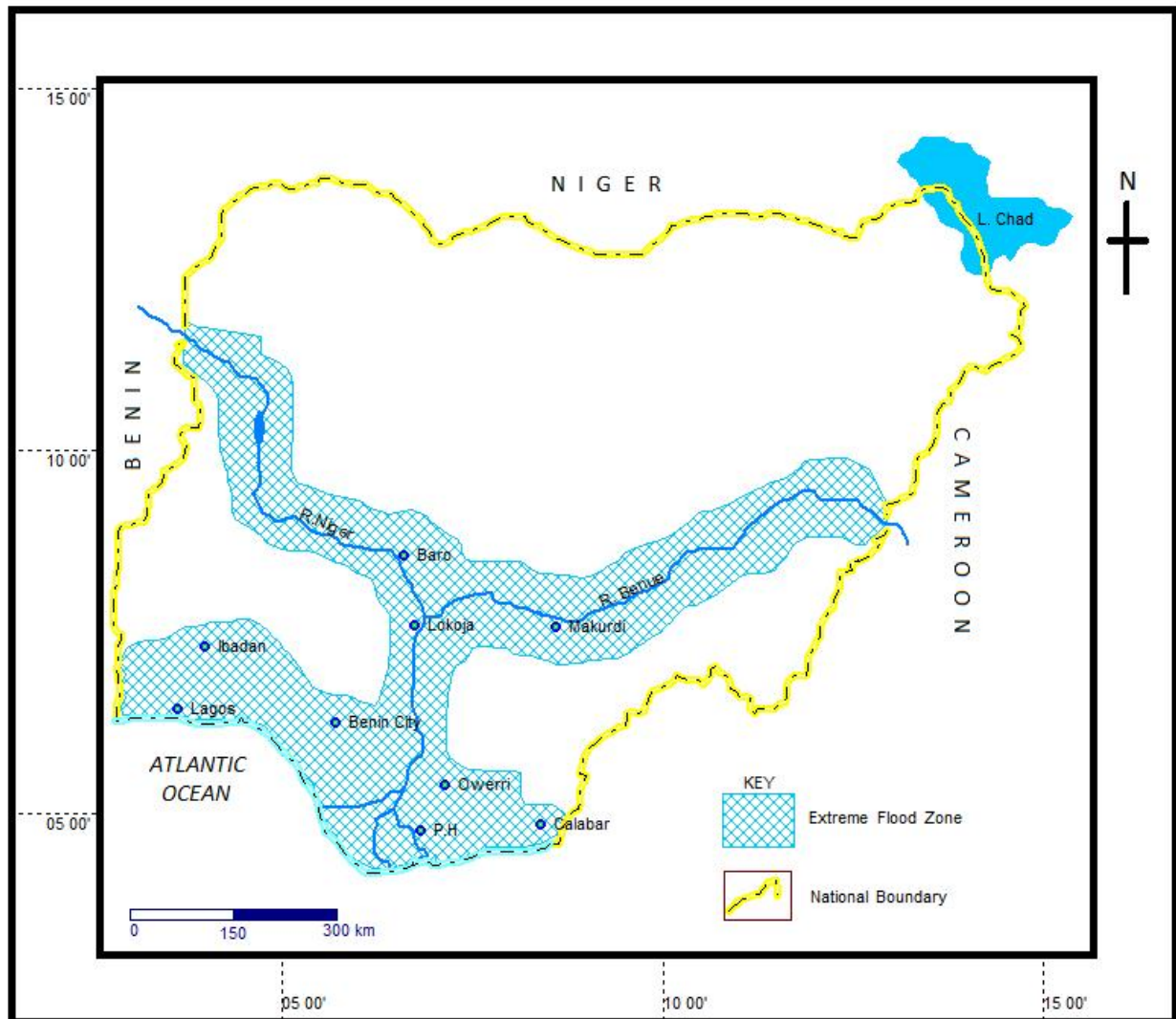


Fig. 1 Extreme flood-prone areas in Nigeria

Source: “Flood Control and Drainage Department” Federal Ministry of the Environment, 2012.

In September 2002, a technical report of the ministry titled “Ecological Disasters in Nigeria” described flooding as an age-old problem in many parts of Nigeria. The document noted that flood disaster is becoming more frequent, intense and unpredictable for many communities. The paper also observed that flood incidents in Nigeria are not the result of a single cause but is the effect of a number of associated problems. The document re-emphasized the need for the continued adoption structural and non-structural strategies to combat flood hazards in Nigeria

The continued propensity of flood incidents in Nigeria necessitated the establishment of additional institutions from the late 1990s to assists in flood disaster management in Nigeria (Ndukwe and Chiemelu 2010). The new institutions are:

- 151 i. National and State Emergency Management Agency (NEMA)
- 152 ii. National Commission for Refugees (NCFR)
- 153 iii. Federal Environment Protection Agency (FEPA) (established earlier in 1988) and
- 154 iv. Nigerian Metrological Agency (NIMET)

155 NEMA procures and distributes relief materials in the form of food items, non-food items
156 and bedding materials to the affected victims while a technical mitigation committee of FEPA
157 undertakes flood impact assessment responsibilities and develop structural and non-structural
158 measures. NCFR prepare emergency shelters or find suitable accommodations for internally
159 displaced persons. NIMET studies the pattern of precipitation nationwide and acquires, classifies
160 and preserves metrological data needed for flood prediction and forecasting. Non-governmental
161 organizations, particularly the Red-Cross society respond by providing cash ad relief materials to
162 affected persons or by ensuring that those who lost their lives are properly buried.

163 GAPS IN THE CURRENT INSTITUTIONAL RESPONSE APPROACH

164 Our focus in this section is not to assess the strengths and weaknesses of the array of
165 legislations and agencies involved in the planning and management of flood disasters in Nigeria.
166 Rather our goal is to highlight the gaps in the current institutional response approach.

167 When a disastrous flood episode occur in Nigeria, the institutional response approach has
168 almost always, consisted of facilitating the evacuations of victims and providing such victims with
169 the most urgent assistance (food, clothes, medicine etc) in order to alleviate hardship and facilitate
170 recovery. Literature evidence show that the practice of providing relief materials to flood victims
171 started in the early 1980s during the Ogunpa, Sokoto-Rima, Buguada river flood disasters (Anih,
172 2004). Before the 1980s, the government's flood response plan had been limited, for the most part,
173 to the collection of data on local impacts of floods to substantiate governments request for
174 assistance (Obeta, 2009). After the above-mentioned major fluvial flood episodes, many state
175 governments, especially those with expansive flood-prone areas, took a more active interest in the
176 flood dynamics of their local environments. The federal government, on its part, included 'extreme
177 flood' on the list of ecological disasters which threaten the livelihood of many Nigerians and so
178 merit government attention, response and action. The Federal and some state governments
179 constituted adhoc-flood mitigation units and empowered such units to implement flood alleviation
180 measures.

181 In the wake of the 2012 flood disaster, the Federal Government, as expected declared it a
182 **National Disaster** and released ₦17.6 billion to the affected states. The money was allocated for
183 the mitigation of the effects of the flood on Nigerians. The President said that while the affected
184 states will receive ₦13.3 billion altogether, the Federal Government agencies will receive ₦4.3
185 billion. The affected states were categorized as follows;

186 Category A states: Adamawa, Anambra, Bayelsa, Benue, Delta, Kogi, Oyo and Plateau.

187 Category B states: Bauch, Cross River, Edo, Imo Jigawa, Kaduna, Kano, Lagos, Nasarawa, Niger and
188 Taraba

189 Category C states: Abia, Ebonyi, Gombe, Katsina, Kwara, Ogun, Ondo and Rivers

190 Category C states: Akwa-Ibom, Borno, Ekiti, Enugu, Kebbi, Osun, Sokoto Yobe, Zamfara and Federal
191 Capital Territory.

192 All categories ‘A’ states received ₦500 million each; category ‘B’ states, ₦400 million each; category
193 ‘C’ states, ₦300 million each, and category ‘D’ states, ₦250 million each” (Adebayo and Oruonye
194 2013). To further intensify Federal Government intervention activities, the following agencies of
195 the Federal Government were allocated funds as follows: ministry of Works, ₦2.6 billion; National
196 Emergency Management Agency (NEMA), ₦1.1 billion; Ministry of Environment, ₦350 million;
197 National Commission for Refugees, ₦150 million; and technical committee on flood’s impact
198 assessment, ₦100 million.

199 With these cash and material resources, NEMA provided relief materials in the form of food
200 items, non-food items and bedding materials to the affected people. The challenge that the NEMA
201 encountered was the large population to contain with during the disaster management and sharing
202 of relief materials. Also most of the affected people complained that the relief materials provided
203 was too small to cushion the effects of the flood. The Government officials on the other hand
204 insisted that the relief materials provided cannot be adequate enough to cushion the effect of the
205 flood considering the colossal losses they suffered but was meant to serve as a palliative measure at
206 the moment.

207 Literature evidences (Adelekan, 2010; Ankintola and Ikwuyatum, 2012; Adebayo and
208 Oruonye, 2013) show that these institutional approaches have not improved the ability of the
209 Nigerian population to anticipate and cope with major flood hazards. Several factors are responsible
210 for this. The leading factors include:-

- 211 1. Absence of prior planning that addresses issues which boost flood-loss potential such as
212 unwise land use practices etc.
- 213 2. Limited resources availability in threatened communities.
- 214 3. Absence of land use policies that can:
 - 215 (a) Steer potential developers to alternative locations outside the flood-prone areas
 - 216 (b) Outlaw or reduce the rate of floodplain invasion
 - 217 (c) Compel governments to invest in flood mitigation measures on a sustainable basis.
 - 218 (d) Prohibit deforestation and other unwise land use practices in threatened areas.
- 219 4. Absence of up to date flood control acts
- 220 5. Inadequate number of sustainable flood control strategies especially in low lying coastal
221 and southern urban areas of the country.
- 222 6. Lack of up-to-date flood outline maps and weak regulatory framework

Infact, Agbola et al (2012) noted that the weakness of existing institutional frameworks for flood disaster management contributed to the 2010 to 2012 flooding in Nigeria. Manifestations of the weak institutional frameworks are reflected in many detrimental activities taking place in Nigeria cities. Building construction on river floodplains, indiscriminate waste disposal, and illegal parking of vehicles at unauthorized locations are common in the city. In some instances, building approvals were granted without a clear understanding of the nature of the environment and the impacts of the construction on the overall environmental quality of the locality. Such constructions both obstruct the free flow of water and are at risk of being flooded. Also, several other workers such as Obeta (2009) and Kolawole et al (2011) have noted that the current institutional approach to flood disaster management in Nigeria lead to the implementation of hastily prepared assessment and response procedures which are mostly ineffective, unsustainable, poorly-coordinated and wasteful. This fact led Lagos State Government to search for an alternative approach as discussed below.

THE LAGOS STATE FLOOD PREPAREDNESS PLAN

The Lagos state flood preparedness plan is currently the first of its kind in Nigeria (Njoku and Udeagha, 2013). The response plan deals with flood prevention and mitigation, response and recovery, and it encompasses both short term and long-term actions (Odunuga, et al 2012). The preparedness plan was developed in 2003 in response to the incessant and recurring flood disaster in almost every part of the state (Obeta, 2009). The specific objectives of the plan according records in the State Ministry of the Environment are to:

1. Provide the state with effective and systematic plan or means of executing pre-flood prevention activities as well as of dealing with (emergency) flood problems which may occur over the short or long-term.
2. Identify and recommend the most appropriate mechanisms for response and recovery in affected areas.
3. Specify response actions to be implemented during disaster or in threatened areas.
4. List agencies and responsibilities in the flood response plan
5. Determine response activities to be handled by affected communities, organizations, local governments and state authorities
6. Gather and evaluate data about the nature of floods
7. Identify problems that are beyond the ability and capability of the threatened or affected area (community or local government) to resolve.

Records available in the state ministry of the environment show that the response plan is based primarily on resources sourced from the local and state governments; federal assistance is generally viewed as a “last resort” when local capabilities and funds are exhausted. The plan emphasizes the need for stakeholders’ involvement and has nine units in its organizational structure. The units and a flow diagram of the plan are shown in figure 2.

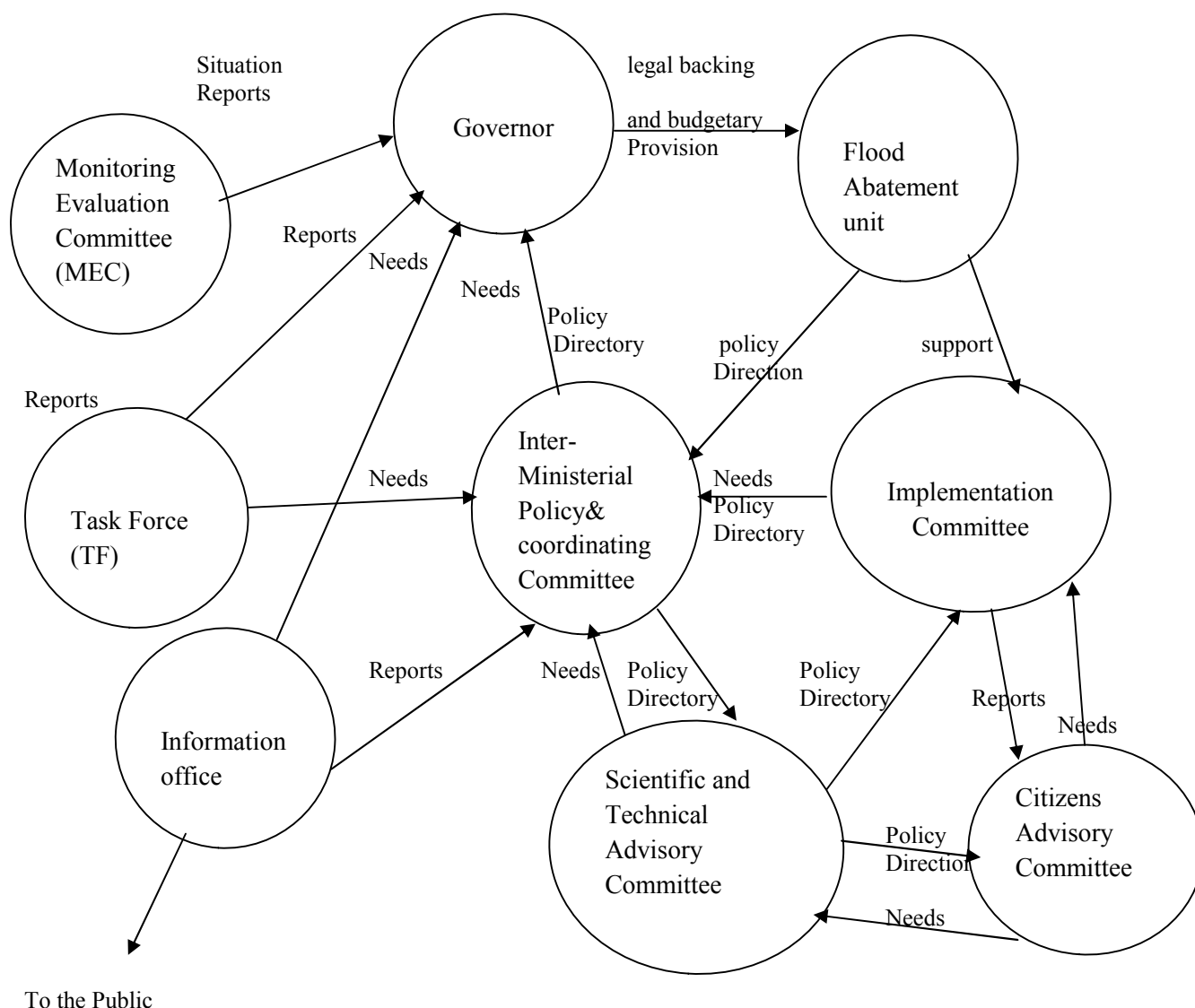


Fig. 2: Units and Flow Diagram of the Lagos State Response Plan
Sources: Lagos State Ministry of the Environment

The abatement unit is housed in the Lagos State Ministry of the Environment. The staff of this unit carries out pre-flood prevention activities. The unit is the most visible, most active and for Lagos residents, the most dreaded (because the unit demolishes structures built across natural water flow paths) organ of the preparedness plan. The staff, dubiously referred to as *the “Environmental Police or the Flood Abatement Gang (FAG)”* by the urban residents work throughout the entire urban landscape in their uniform apron to reduce flood damage potentials. They perform the following pre-flood prevention responsibilities:

- I. Sensitization exercises
- II. Persuade the residents not to reside in flood-prone areas

- 311 III. Clear drains
- 312 IV. Authorize the demolition of structures constructed across natural water flow paths
- 313 V. Assist in disseminating early flood warning information to all the nooks and crannies of
- 314 flood-prone areas
- 315 VI. Dissuade residents from dumping waste in the urban drains
- 316 VII. Network with other agencies with similar goals
- 317 VIII. Assist all stakeholders to carry out their responsibilities as enshrined in the preparedness
- 318 plan

319 Other units get involved when a catastrophic flood occurs or when emergency conditions
320 threaten. When this happens the state government constitutes an inter-ministerial policy and
321 coordination committee that is typically composed of high-level representatives from concerned
322 agencies. This committee sets the general tone and direction for the plan. It establishes impacts
323 assessment system, assembles and analyzes data, makes recommendations to the governor on
324 appropriate mitigation measures, but leaves the operational duties to the abatement unit and task
325 forces. The scientific and technical committee is composed of nationally recognized scientists,
326 usually drawn from different scientific disciplines. This committee undertakes scientific studies,
327 investigations, identifies problems, proffers solutions, develops monitoring strategies and ensures
328 that all recommended and/or implemented actions are tied to good science. The governor based on
329 recommendations, project scope, severity of the disaster and availability of resources determines
330 whether to set-up a task force to handle short-term projects and/or an implementation committee to
331 handle long-term projects. Other units in the system includes the mitigation information office
332 which acts as a clearing house for flood-related information and the citizens advisory committee,
333 which generates people's support for the program.

334 OBSERVATIONS/COMMENTS

335 Nigeria lags behind many other countries in flood disaster management (Fitzpatrick et al
336 2004; Goldstein et al, 2007). In the United State of America, Britain, Australia, Canada, India,
337 Pakistan, China, Bangladesh and Philippines considerably more efforts are directed towards flood
338 disaster management both at national and provincial levels (Cupta, 2007 & Suresh, 2007)
339 Governments and citizens in these countries fight flood hazards through carefully developed and
340 properly coordinated response and recovery activities that drastically reduce flood-loss potentials
341 (Reddy, 1986; Cupta, 2007).

342 Therefore the Lagos State response plan initiative is, in our view, a step in the right
343 direction. The plan will assist governments and other agencies that are interested in developing
344 sustainable response procedures to fight flood hazards. The lagos model contain innovative lessons
345 which include how to organize and maintain effective citizens involvement, collect and analyze
346 data, assess and prioritize problems, develop and implement response activities and communicate
347 results of programme activities. The federal government and even other state governments can
348 adapt and further develop the Lagos model to address both the assessment and response capabilities

of government. On the alternative, the federal government can constitute a committee of experts and mandate him to develop a national response plan needed for implementing and/or coordinating the nations' flood mitigation and recovery responsibilities through actions and policies that ensure scientific rigor and quality. This will:

- (i) Aid the development of sustainable flood control structures
- (ii) Facilitates the establishment of sound flood control acts
- (iii) Improve flood warning systems and
- (iv) Assist in setting flood insurance premiums in Nigeria.

Finally, there is no gainsaying that the Lagos state flood emergency preparedness plan is a real practical demonstration of governments' commitment to fighting flood hazards. The goals are laudable and the approach, particularly as regards stakeholders' involvement, is quite appreciable. The point of concern however is that the plan developed eleven years ago (2003) is due for review.

CONCLUSION

Floods are natural occurring processes that are difficult to prevent but can be managed in order to reduce its physical, social and economic impacts. In recent times, flood disaster management, like any other disaster, has shifted from relief, rescue, rehabilitation and recovery to a new paradigm that stress on prevention, mitigation, preparedness and emergency response. Nothing worthwhile is achieved without prior planning and flood disaster management is no exception. In Nigeria, there is no preparedness plan at present, upon which flood emergency conditions can be tackled. NEMA and other concerned agencies only provide relief materials and rescue victims. In short, the Nigeria Government & her citizens appear to be conscious but helpless in confronting this environmental problem which confronts her repeatedly. Unless and until something is done, as recommended above, the ongoing urbanization and rapid population growth may complicate the problem so much that it becomes incurable.

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