

## Discussion Paper on Flood and Wetland Management

### Problem Statements

- Flood and Wetland Management should be a political priority since it is the adequate tool to respond to the challenges of urbanisation like population growth, floor sealing, loss of biodiversity and to the challenges of climate change. In recent years, such a political will was lacking; the draft climate change policy and the climate action plan e.g. had been left unattended since 2015; the agreement signed in 2013 with the ICLEI Cities Biodiversity Centre (Local Action for Biodiversity: Wetlands and Communities) is yet to be honoured.
- Climate resilience strategies are cost intensive but the investment into research, development and implementation of resilience infrastructure is quickly paying off compared to funds spent in the next decades in rebuilding roads, houses and drainage canals as a result of increased floods. Those huge sums would literally go “down the drains”. Opportunities to tap into international climate change or green development funds have not yet been explored or have not yet been successful, mainly due to the lack of sincere political commitment.
- Efforts to implement a regionally coordinated drainage system have not been properly coordinated between the different ministries and states. Ministry of Physical Planning and Urban Development (MPPUD) is still approving building permits which clearly violate the drainage master plan for existing built areas (see Map 3.13. – VGC vs. Melrose Park Estate UPPresearch). There is no supervision or enforcement of the drainage master plan in newly developed areas, many estates end up building drainage canals with inferior quality materials which do not connect adequately to the overall drainage network out of ignorance, and sometimes to save costs.
- Wetlands as resilient infrastructure and buffer zones for floods have not yet been sufficiently recognised and protected. Development permits are approved by MPPUD at the same time such areas are under the protection of LASPARK.



Figure 1: Encroachment of Anthony wetland between 2014 and 2018  
(Source: Google earth 2014)

- Encroachment of Anthony wetland between 2014 and 2018 .
- LASPARK, the agency under the Ministry of Environment, with the mandate to develop and maintain open and green spaces including wetlands, does not have the necessary political backing and legislative power to restore, protect and enhance such areas, neither does it have the right human resource or its own budget to function appropriately.

## Actions for Adequate Flood Management and Drainage Strategies

1. Ministry of Environment through the Office of Drainage Services coordinates the gradual implementation of the 2015 Lagos Drainage Masterplan with Ministry of Transport and Ministry of Works and Infrastructure (for roads), with MPPUD and Ministry of Housing and their relevant agencies, especially the New Towns Development Agency (for housing and commercial areas).
2. Ministry of Environment submits an executive Drainage Master Plan bill to State House Assembly to make the drainage master plan enforceable through a law with clearly designed mandates for review and enforcement under the lead of the Office of Drainage Services.
3. Ministry of Environment publishes the drainage master plan on its website to enable local residents to verify whether new interventions in their areas are potentially violating the plan and to take appropriate actions.
4. Office of Drainage Services sets up a citizens' hotline for urgent inquiries and complaints and sets up a task force to follow up where necessary.
5. The Drainage Master Plan bill has to include appropriate sanctions for sand filling projects and for those who approved them without adequate technical expertise/ EIAs. To avoid further negative impacts of such existing projects on built areas, Ministry of the Environment sets up a technical committee with representatives from MoE, Ministry of Works and Infrastructure, Ministry of Waterfront, Ministry of Justice. The committee, using funds from the drainage budget, has to incorporate and implement additional drainages needed as a result of the change in discharge and backflow. Where current environmental, building and development regulations have not been observed by the approving authorities and the developers, appropriate sanctions and legal measures will be taken to recover the costs for the necessary adjustments in the drainage network.

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Example of such unplanned impact:

A newly reclaimed 'Unnamed Island' near Osborne has tilted the flow pattern of the Lagos Lagoon and is causing a back-flow of water into Adeniji-Adele Estate in Lagos Island. The reclamation works at Ilubirin Housing Estate across the Ring Road have a negative impact on the discharge of storm water from Jankara/Adeniji-Adele primary channel by elongating the discharge length into the lagoon. This is a major factor in slow discharge and back-flow of water from the lagoon into Adeniji Adele Estate.



Figure 2: Historical Imagery of Adeniji Adele in 2015 Showing the Ilubirin Housing Estate Project and the New Unnamed Island (Source: Google Earth, 2018)

6. A technical committee with representatives of Ministry of the Environment, Ministry of Justice, Ministry of Commerce and NGO's develops timeline and enforcement guidelines for the taxation or ban of use of plastic bags, plastic bottles and single use fast food containers drawing from the experiences of Kenya and Rwanda. Most of the flooding in Lagos is not as a result of changes in rainfall patterns but because drainage systems are blocked by enormous quantity of plastic rubbish.

## Actions to Protect, Conserve and Restore Wetlands in Lagos State



1. Upgrade LASPARK to the same level as the Office of Drainage Services under Ministry of Environment and equip it with the necessary personnel and annual budget for restoring, protecting and enhancing wetlands and green spaces to serve as flood buffer zones.
2. LASPARK develops a proposal for a network of connected green corridors including wetlands, rivers, existing parks ("Green Corridor Masterplan") with an annual action plan and budget.
3. After approval of the masterplan by the Executive Council, LASPARK will start design and implementation of the first phase by leading an inter- ministerial committee. Relevant local government officials of the area where the project will be located as well as representatives of the residents and NGOs active in the area will be part of the committee. The costs for the preparatory and coordination stages have to be included into the overall budget plan.
4. In addition, LASPARK, LAMATA, Ministry of Agriculture and Ministry of Science and Technology closely cooperate to ensure that green infrastructure will be an integral part of all new infrastructure developments such as utility and transport, e.g. through the use of drainage corridors and setbacks for walking, cycling and urban agriculture drawing from the proposals and experiences of the Linear Park project planned between Anthony Village and Maryland. This would provide additional flood control, drainage, biodiversity vital for sustainable development and to use green public spaces for the benefit of the livelihoods of low income citizens.
5. Ministry of Environment finalises its wetland policy and prepares a bill to the State House Assembly to sign it into law to be able to enforce wetland conservation and management.

### Funding:

Considering that climate change adaptation through a functioning drainage system and wetland protection and enhancement will be one of the political priority areas, a Contributory Flooding Fund will be created, from a certain percentage of each ministry's annual budget, to cover the additional costs for human resources and projects needed by the Office of Drainage Services and LASPARK. Cost benefit analysis studies of flood management in Lagos state will compare present and estimated future expenditure for drainage management and constant infrastructure repairs with costs of the above proposed sustainable cost-effective measures.

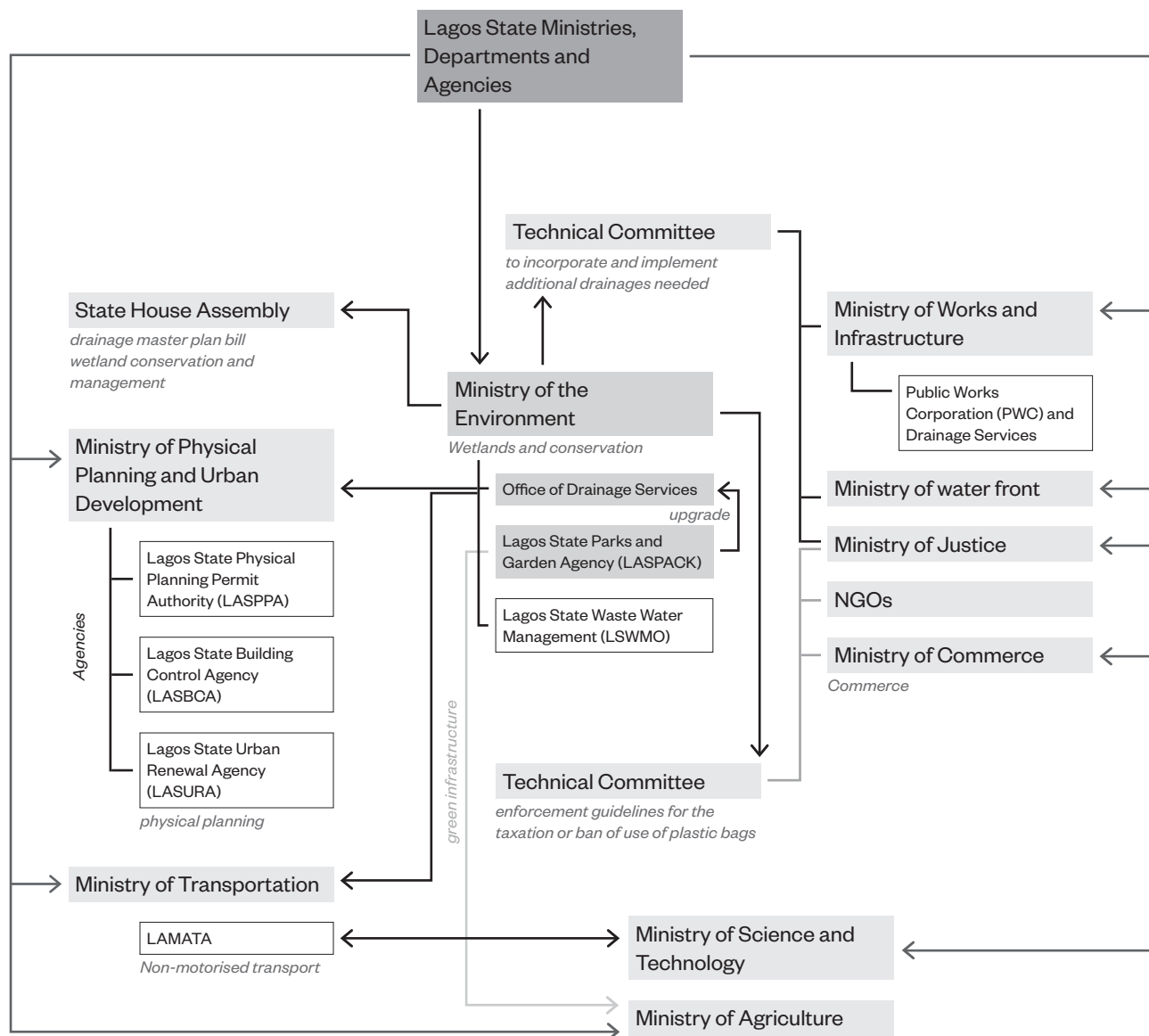


Figure 1: Proposed interconnectivities between Ministries, Departments and Agencies

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