Hydro-hegemony and Hydropolitical Complexes

A Preliminary Assessment of the West African Case

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by Frédéric Julien* & Francesca Greco**

*Visiting Scientist at the Council for Scientific and Industrial Research (CSIR), South Africa
frederic.julien@gmail.com
**Affiliate Researcher at the National Research Council (CNR), Italy
frangreco@yahoo.com
Aim of the Study

- This study aims to explore and verify whether there is a presence of hydro-hegemony in West Africa, and to which extent this region can be described as a hydropolitical complex.

- This is NOT a presentation of the final results, but rather a preliminary study open to debate and suggestions.
Outline

- Theoretical tools
- Hydropolitics in West Africa
- West Africa as a hydropolitical complex?
- Is Ghana a hydro-hegemon?
- Is Nigeria a hydro-hegemon?
- Hydro-hegemony within a hydropolitical complex
- Future developments of the study
- Open questions
Theoretical tools

- The Hydopolitical Complex & (sub)regional analysis:
  - Multiple basin & aquifer sharing creates political linkages between otherwise physically closed water systems as well as interdependence between riparian states;
  - As different states have different powers, different water systems have different strategic importance.

- The Hydro-hegemony Framework:
  - From a conflict/cooperation dichotomy to a spectrum;
  - Allows to study the effects of power distribution within a hydropolitical complex.

- These two emergent ideas will be here applied to an under-studied region, West Africa (WA)
Hydropolitics in West Africa
-territory-

- Two definitional criteria:
  - Density level of international interactions (idea of a ‘complex’);
  - Hydrological unity (‘hydropolitical’ character of the complex).

- Two sets of boundaries:
  - Economic Community of West African States (ECOWAS) as the institutionalisation of a high level of international interactions and a symbol of shared identities, interests and concerns;
  - Permanent Inter-States Committee for Drought Control in the Sahel (CILSS) as the expression of regional hydropolitical concerns.
WA as a Hydropolitical Region

Note: in a hydroclimatic perspective, defined this way WA encompasses the entire Gulf of Guinea (wetter zone – in blue) and the western part of the Sudano-Sahelian area (drier zone – in yellow)

Source: redrawn and modified from Ashton (forthcoming)
Hydropolitics in West Africa - hydrography & hydrology -

- Apparent water abundance:
  - Regional renewable freshwater resource of over 1 MM/m³/a;
  - Current withdrawal rate = between only 1 and 3 %.
- Stark contrast between wet and dry zones:
  - Water scarce areas hidden behind regional water abundance;
  - Countries typically have a high water dependency ratio.
- Triple temporal variability: seasonal, inter-annual and inter-decennial
- High level of resource sharing: while accounting roughly for 25 % of the continent’s surface, WA comprises partially or totally 25 of the 63 African transboundary river basins
Significant Transboundary Water Resources in WA

Transboundary Aquifers

Transboundary River Basins

Source: redrawn and modified from Ashton (forthcoming)
Hydropolitics in West Africa
-water for development-

- As maybe the poorest region on Earth, WA is in urgent need of socioeconomic development
- Secure water supply lies at the heart of development
- WA lacks the ‘adaptive capacity’ or the ‘ingenuity’ to cope with the spatio-temporal variability of its water supply availability (‘structurally-induced water scarcity’)
- This means *inter alia* that WA has a low water storage capacity, few irrigation schemes and a hydro-power potential largely unexploited
- Large investments in hydro-infrastructures should occur in the shared water systems of WA during the next years (conflict and cooperation opportunities)
WA as a Hydropolitical Complex?

- WA needs to exploit its water resources for strategic reasons (e.g. food and energy security). This means securing a supply highly variable in its availability.
- Water being shared, dev. projects will be impacting each other. Externalities and low technico-financial capacities of WA make difficult regional dev. without cooperation. Non-regional dev. could be endangered by communicating instability (weak states).
- So, WA’s “[...] dependence on shared water systems [...] is [or will be] of such a strategic nature that this dependence starts [or will start] to drive inter-state relations of potential amity and/or enmity in a discernable manner” (Turton et al., forthcoming).
Water challenges have already triggered cooperative and conflictive responses:

- All major shared basins have their RBO (except Volta basin);
- Water-related conflicts have been recorded recently.

Hydro-relations can impact general relations (e.g. in 1989, water scarcity, ‘resource capture’ and racial tensions mixed violently in the Senegal River basin)

The high variability of water availability is the driver of hydropolitics in WA and is an independent variable in the equation of WA’s chronic underdevelopment. Global climate change could worsen the situation.
WA as a Hydropolitical Complex?

A First Answer:

- It is NOT possible to talk about water in WA with the same security/strategic connotation as in the MENA region
- There is no ground for outbreak of violence due to strategic needs for water in WA
- Nevertheless, water concerns in WA are interlinked at a regional scale
- We can thus suggest that there is no ‘hydropolitical security complex’ in WA, but more probably a ‘hydropolitical complex’
WA as a Hydropolitical Complex?

- Hypothesises and possibilities to be examined:
  - Water has not been fully securitised yet (low politics level)
  - Guinea plays a special role in WA’s hydropolitics:
    - Niger, Senegal and Gambia rivers have their source in Guinea;
    - Guinea shares no less than 14 transboundary river basins;
    - Guinea is not part of the OMVS (Senegal River basin’s RBO).
  - Possibility of one or two hydropolitical (sub)complexes:
    - Eastern (sub)complex = Niger & Lake Chad basins oriented;
    - Western (sub)complex = Volta and Senegal basins oriented.
  - Differences in state’s and water systems’ status:
    - Nigeria, Ghana and Senegal as ‘Pivotal States’;
    - Lake Chad as a ‘Pivotal Basin’.
Is Ghana a Hydro-hegemon?

- Volta River basin is Ghana’s main source of water and is shared by 6 states (Benin, Burkina Faso, Côte d'Ivoire, Mali, Ghana and Togo)
- 85% of the Volta basin water is used by Ghana and Burkina Faso
- The extremely low incomes of much of the population result in overexploitation of the basin’s natural resources, which in turn seriously affect the sustainable development of the region
- The primary anxieties are:
  - Reduction in flows into the Volta Lake for hydropower generation from Akosombo Dam on which Ghana relies for almost all its energy supply;
  - Loss of floodplain farming due to regulation of the river upstream;
  - Transboundary pollution;
  - Migration of aquatic weeds from the riparian states. Other concerns include occasional unplanned flooding of northern parts of Ghana as a result of opening of dam spillways in Burkina Faso.
- Ghana is also sharing underground coastal aquifers with Togo and Côte d'Ivoire.
The Volta River Basin with its Ethnic Groups
Is Ghana a Hydro-hegemon?

- Low water levels at the Akosombo Dam in 1998 caused a major energy crisis in Ghana and many blamed Burkina Faso's water developments.
- A persistent decrease in rainfall in recent years has greatly exacerbated water shortages and competition in the basin.
- Despite various cooperation initiatives on the Volta basin, it remains one of the few major transboundary river basins in Africa with no formal legal and institutional arrangements between riparian states regarding its management. The Volta Basin Authority, with the 6 riparian states on board, should be formed this year through the support of the EU Water Initiative.
- Ghana prepares to commence another dam project at Bui, and land-locked Burkina Faso clearly looks to the basin’s rivers as a mean of development. Therefore, no time should be lost in starting up the activities of the Volta Basin Authority.
Is Ghana a Hydro-hegemon?

- The internal discourse:
  - Water professionals and policy makers of Ghana are presenting the current will to be on board with Burkina Faso and the other riparian states in a multilateral RBO as a natural consequence of the re-appropriation of their own “traditional patterns” of water preservation and equitable sharing, pre-existent to colonial era;
  - This is sustained by an interpretation of the colonial history of Ghana and Burkina Faso as an attempt to break “pre-colonial environmental harmony”;
  - Ghana (i.e. the Water Resource Commission and the Ministry of Waters, Works and Housing) is thus willing to “cooperate” with Burkina in the name of a “return to innocence”.
Is Ghana a Hydro-hegemon?

- Should we buy this discourse? Is it Ghana’s planning to share Volta’s waters as equally as traditional laws were doing in pre-colonial times?
- We must not forget that Ghana is the most politically stable state of the area and that it is attracting huge investments from abroad. This is encouraging economic growth: is Ghana taking advantage of its relatively bigger economic power?
- Abstain from judgment: it is premature to say whether Ghana might be considered as a hydro-hegemon.
- We must wait and see for its behaviour inside the Volta Basin Authority. For the moment, it can be considered as a hydropolitically powerful state.
Is Nigeria a Hydro-hegemon?

- Nigeria is a hegemon inside the WASC: its population, economic and military size have no near equivalent
- Nigeria has used its unmatched power in the past to act unilaterally and to impose its views to the region
- This general hegemony impacts the water sector
- Nigeria: dominant neighbor or genuine leader?
  - Dominant in its Lake Chad based dispute with Cameroon;
  - Leader in its commitment to the Niger Basin Authority?

“Regardless of the controversy that dogged Nigeria’s role in ECOWAS’ peacekeeping operations in Liberia and Sierra Leone […] its commitment of large human, logistical and financial resources made it evident that, if used properly, Nigeria’s resources can be a force for good in the sub-region” (Bah, 2005)
Is Nigeria a Hydro-hegemon?

- Is Nigeria capable of controlling WA’s waters?
  - It is afraid for its past infrastructure investments in the Niger basin and exacted a 90% guarantee about actual inflows;
  - Meanwhile, Mali would have already found 75% of the funding for its Tossaye Dam and there are about 20 large dams projects in the basin (including those of Nigeria);
  - The federal nature of Nigeria fragments the decision process in the water sector and allows internal inter-states disputes;
  - Nigeria is downstream of 10 other riparians on the Niger;
  - It directly controls less than 5% of Lake Chad’s inflows;
  - At least 18 treaties have been signed about Niger or Lake Chad basins’ resources. Many do not include Nigeria.

- Still, dependence and power are good incentives…
Hydro-hegemony within a Hydropolitical Complex

- Because of the political links between water systems created inside a hydropolitical complex, it is possible for a hydro-hegemon to impact on water systems it is not riparian to (e.g. Nigeria could stop Guinea from building a dam on the Niger River with a possible Guinean reaction being to develop another river to which Nigeria is not riparian)

- In WA as we defined it, we might find that there is, for example, one regional hydro-hegemon and, concurrently, some sub-regional “dominant” states; these would not be regional hegemons but might exercise their predominant hydropolitical power over their neighbours (the equivalent of “Pivotal States”?)
Future Developments

- Interviews with local stakeholders (e.g. water ministries’ officials, consultants, NGOs, universities, private sector, etc.) – on going
- Case studies for each of the major river basins (Niger, Senegal, Lake Chad, Volta and Gambia) of WA
- Better inclusion of the transboundary aquifers
- Exploration of the management of the multiple small transboundary river basins on the Atlantic coast
Open Questions

- As a researcher, how to consider answers from insiders if they clearly reproduce the view of the ‘sanctioned discourse’ of their country?
- How to analyse hydropolitical complexes which are NOT candidates to violisation? (Buzan-Neumann continuum)
- Do we have a particular field-research approach for water policy researchers? Where do we start from?
- How to cope with sanctioned discourse, as a researcher? (availability of data, risk of being considered as an “outsider” who wants to “teach the lesson”)

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The slide discusses various open questions for researchers, particularly focusing on the consideration of insider perspectives, the analysis of complex hydropolitical systems, the development of specific field research approaches for water policy, and strategies to handle sanctioned discourse from an outsider perspective.