Politics of global environmental management: involvement of public administration and key concepts

Richard Ingwe

Institute of Public Policy and Administration (IPPA), University of Calabar, Nigeria; Centre for Research and Action on Developing Locales, Regions and Environment (CRADLE), Calabar, Nigeria. Corresponding author: R. Ingwe, ingwe.richard@gmail.com; cradle.africa@gmail.com

Abstract. Dynamics in the ecosystem, equilibrium or balance between species of plants and lithosphere and the biosphere) over time and extreme events (e.g. climate change) draw attention to the need for increasing understanding of the foregoing as a means of improving public administration. Despite the numerous changes that the world's publics have experienced previously and recently e.g. the surpassing of the size of rural dwellers by their urban counterparts since the late 2000s, exploding population, extinction of species of flora and fauna, mass depletion of the populations of mammals, bees, among other ecological-environmental crises, public administration fails to adequately map and respond to such challenges thereby allowing anthropocentric governments and mega-corporations, among other stakeholders to continue to politicize the attendant risks, hazards and disasters enthroned. The objective of this article is to highlight this issue. To inaugurate the subject-matter and subsequent ones, we introduce the environment, basic concepts necessary for discussing challenges associated with it and public administration. Finally, directions as well as key issues focusing on the undertaking of further discourses on the subjects-matter are proposed.
Key Words: environment, sub-systems, public administration/policy, global, biosphere.

Introduction. United Nations Secretary-General, Ban Ki-moon recently said: "This year we can make history by adopting our ambitious and adaptive sustainable development agenda, and a universal climate agreement" (UN-DESA 2015). Global discourses, such as the one where Ki Moon commented from above, have recently been replete with reports regarding conferences and invitation of essays capable of enriching the proposed transition from the pursuit of the achievement of the Millennium Development Goals (MDGs) to those of the Sustainable Development Goals (SDGs) (Environment & Urbanisation 2015). The development community is continually assailed with reports on increasing frequency of environmental crises: from worsening adversities of climate change and the impacts of the extreme events that are associated with it. Using media offered by new information and communication technologies, scientists inform us that it is becoming increasingly alarming that the total population of the world's bees (the honey-making and plant flower pollinating insects) have declined by between 40% to 60% from their previous levels of abundance). While the cause of the rapid depopulation of bees is yet to be accurately established, we also learn that the population of blue whales has been reducing rapidly. Dead blue whales are frequently being discovered to contain within their guts large quantities of plastics, toxins, among other contaminants. The latter are attributed to the worsening status of the management of the hydrospheric subsystem of the overall environment. As for the bees, whose abode includes various forms of the lithospheric subsystem of the environment, especially habitats that are conducive to various plants that flower and therefore attract bees that facilitate the pollination of the plants' flowers).

We often loose track of the way we developed our knowledge and thinking about the foregoing issues: the environment, resources, human life/future, development, among other related issues. After the First and Second World Wars, especially the latter which ceased in the mid-1940s [Note 1] or thereabout, statesmen around the world envisioned the need to create institutions capable of addressing challenges that many nation-states face simultaneously, mobilizing and pooling resources into suitable mechanisms (agencies) and deploying same in more effective ways for the mutual benefits of countries concerned or afflicted by particular problems. A major international governmental organization (IGO) that resulted from this line of thinking is the United Nations (UN system). The UN, which has been undergoing reforms presently comprises numerous agencies, each created and dedicated toward addressing particular challenges

that most member nation-states have to contend with. For example, while the UN was initially saddled with the problems of peace arising from the hostilities that fell under the First World War and Second World War and the previous cultures of military geopolitics that were rather common, the IGO experienced dynamics in response to changes that the Post-War period (1945 and onwards) presented. Therefore, the UN gradually transformed from addressing wartime issues toward focusing on globally recognizable peacetime challenges. These dynamics saw the emergence of the following agencies for addressing various issues: International Bank for Reconstruction and Development (IBRD) a.k.a., The World Bank, and later UN Development Programme (UNDP), focusing on development; the World Health Organisation (WHO) concentrating on health; the UN Environment Programme (UNEP) – for the environment, among others.

While the UN continues to perform its functions independently, other individuals and groups carry out various tasks either alone and/or in cooperation with the UN System. Very importantly, there are some individuals and groups that are involved in regular monitoring of the state of the world generally and regarding specific thematic challenges. Reports of their observations are also regularly presented at UN special sessions from which the most urgent issues are selected for institutional programming, planning and management. In this connection, we decided that the explication of this course would include recent global discussions of the ten most important challenges that world has been facing and would be contending with in the next half of a century. The conferees (noted and listed the environment (and the myriad crises that face it) [Note 2] as the fourth most challenging. Others issues are: (i) energy, (ii) water (iii) food (v) poverty (vi) terrorism and war (vii) disease (viii) education (ix) democracy, and (x) population. Another survey of global issues showed that about 82 per cent of them (issues) are directly environment- related i.e. including problems pertaining to natural resources (availability, contests for them, sharing of them, and so forth). This background makes a case for the environment (and the way politics shapes and affects the management of crises it faces) considering the fact that virtually all of the global (and local) issues are related to the environment and natural resources (Joel 2014). For the benefit of doubt, we could briefly review some of the details of the global challenges even if it is simply the nomenclature. It is worth noting at this juncture that public administration has a rich history of attending to the environment. One of the most profound works within academic and professional practice on the management challenges of the human environment in Africa was the collaboration for addressing Nigeria's worsening urban areas in the 1960s and a little afterwards. The latter work was managed by one of Africa's foremost public administrators, a former professor of public administration at the University of Ife (presently, Obafemi Awolowo University), Ile Ife, who later served as the Executive Secretary of the UN Economic Commission for Africa, ECA, Dr. Adebayo Adedeji (Adedeji & Rowland 1973).

The problem

Increasing environment-related crises vs. compartmentalisation of conventional public administration. Since the creation of public administration as a field and a practice or professional area, it has like its cousins in the social sciences, liberal arts and the humanities been treated as one of the many fields in a world where challenges faced by the society have naturally been intertwined, versatile and rather fluid in the way they affect many persons and groups. In this way, it has been the case that students as well as practitioners in public administration have to, more than ever before require better guidance, education, knowledge, information and skills in those subjects, fields and issues that previously lay beyond the radar of conventional public administration. As would become clearer in the following essay, the environment as well as the enormous crises that it has had to contend with over the history of humankind, the rather lukewarm attitude of governments of particular nation-states, among other aspects of it, seldom receive attention in much of the public administration literature. In this way, students and practitioners have been encouraged to unnecessarily approach the environment as if it existed separately from public administration. This might have adversely affected the

latter field by way of causing public administration functionaries not to grant serious attention to environmental problems as ought to have been expected.

Objectives. The general objective of this article is to highlight the way global environmental challenges and management of crises associated with them, have become increasingly politicized. Arising from this, we present materials relevant to the achievement of specific objectives. The latter involves providing the grounding concepts, ideas, and contexts necessary for further understanding and clarifying some of the factors (conflicting interests of parties especially nation-states and mega-corporation) that fuels the fires that lead to the processes and phenomena that are recognized and/or described as the "politics of global environmental management".

Organization. We begin by presenting a background to this study. We show the specific circumstances of a degree course that prompted this study. Then, we review relevant literature: this includes an elaboration of key concepts (public administration, public policy, the environmental system, its subsystems, global environmental management). We follow on by presenting the reports of most recent surveys of the "state of our world" i.e. the most pressing challenges that our world faces presently and might continue to grapple with in the forthcoming years and decades. Then, we justify the renewed attention that students as well as practitioners of public administration must be made to pay to environmental challenges as a means of increasing their speed in terms of appreciating the latter problems as a means of sharpening their expertise as the present and forthcoming ages expect of them. Finally, we conclude the article by summarising major points involved, raised in the study and also recommend further academic research directions.

Background. The DPA specifically prescribes that lecturers examine various dimensions of eco-politics in the course description (Department of Public Administration, in the University of Calabar (UniCal), one of Nigeria's over a hundred tertiary educational institutions controlled and governed by the National Universities Commission (NUC) in the 2013/4 session (DPA, 2013/4:63; and, Department of Public Administration, UniCal, CES, 2013/4:67). Our research, teaching and examination in the course decided to devise an appropriate strategy and described a course outline. The latter included a plan to explore aspects of the title such as key concepts (environment, ecology, their meaning(s), origin, catalysts, geographical variegations, bifurcations, "hot spots", among other aspects of the title. We draw from our contributions on the way emerging ideas pertaining to ecologically (or otherwise anthropocentrically)-based pursuit of development shape (inter)national development (Ingwe et al 2009) for guiding students' policy appreciation (Ingwe & Edino 2015).

Strategy and thinking. As prescribed, to frame the course on epistemological-theoretical perspectives and concepts (environmental management, politics at global level and course sub-national and regional scales, the path traversed by these concepts and practices are traced over time (centuries, decades, years). We examine some milestones such as the growth of national and regional economic systems from the industrial revolution via the 1960s, specifically the planning and implementation of the United Nations' Conference on the Environment and Development (UNCED), the Rio Conference of 1992 and the Post-Rio conferences; the Fourth (2007) Report of the Inter-Governmental Panel on Climate Change (IPCC), the Stern Report (2006).

We present these topics by various subdivisions (or categories) of the entire environmental system (hydrosphere, atmosphere and the lithosphere); techniques for managing it and challenges associated with the processes are shown. In imparting knowledge, information concerning the latter, references are made to the UNEP, whose programmes/projects under the Global Environmental Outlook, GEOs (i.e. from its launch to the present) speak to coordination and regulation of the politics of global environmental management (UNEP 2007, GEO$_4$). We examine challenges involved in environmental management such as the law of the oceans; Trans-boundary resources

e.g. JDZ (Nigeria-Sao Tome & Principe). We examine the international political order as well as the international economic order that is closely related to and determines the former; characteristics, architecture for global environmental management. We show how the dominance of OECD nations –and most likely the emerging nations of China, and the rest of the SE Asian Tigers causing "economic miracles" shape the orders. The way initiators of the world orders have been reluctant in accepting viewpoints and policy contributions of the "others" (i.e. non-OECD) polities/economies/environments have been examined via the lenses of neo-liberalism and the way indigenes of developing countries struggle to "make it" and arrive the statuses of their developed countries' levels create "neo-liberalisation". The foregoing (international politico-economic order) are linked or related to the global environmental management.

Required or relevant concepts and issues incorporated. To resolve challenges in course design/description that key concepts required for appreciating global environmental management –as well as the politics arising there from, were downplayed or ignored, we introduce such concepts (e.g. sustainable development, priority issues involved (Joel 2014, among others earlier included).

Theoretical framework and literature review

Sustainable development. This refers to advocacy for implementing in socio-economic activities, principles seeking to apply and perpetuate development approaches capable of leading humanity towards achieving various objectives and targets within broad sectors comprising the maintenance of sound environment, creating harmony among disparate groups forming particular societies and achieving economic growth only sufficient for catering for social needs rather than promoting wastage. Its history is shorter (less than a century i.e. counting from the early 1970s) than rival development approaches that are rather more anthropocentric. Sustainable development principles are mostly agreed upon at global levels as have been facilitated by the UN system. However, the implementation of the various conventions usually signed up by representatives of nation-states and organizations are often re-directed as responsibilities of (sub)national peoples, governments and stakeholders. Therefore, various levels of organization of sustainable development include the UN, among others such as international NGOs at the global level, their counterparts at trans-national regions or and groups of countries and sub-national scales but smaller than the globe. These include: economic regions or continent e.g. regional economic communities (RECS) e.g. ECOWAS; sub-national units i.e. either nation-states and/or regions that are smaller located within nation-states.

From mere development to sustainability of it: shifting paradigms of policymaking. Described as the development decade by the UN, nation-states of the Developing Countries were asked in the 1960s to achieve high rates of gross domestic product (GDP) growth fixed at between six per cent (%) to 10 % per annum. At the end of this decade, the UN and its supporters were disappointed to find that human social welfare did not improve despite the achievement of the rapid rate of GDP growth that were fixed and considered necessary for resolving challenges such as absolute poverty, unemployment, inequality. This caused the new emphasis to shift toward achieving social justice and/or distributive justice as means of (re)distributing the gains as well as the cost of economic development (Izeogu 1984-7; Harvey 1973).

The second thought wave of the 1960s focused on the increasing concern with environmental degradation that had built up since the civilization of human-kind, through the industrial revolution during the past centuries to the present. This referred to the serious damages and scarring of the environment and resources occurring on it thereby arguing that further implementation of anthropocentric development policies that over-emphasize economic growth over and above the eco-centric variety was not headed towards the path of sustainability. To achieve the latter, development planning and management must insist on respect for the soundness of the environment, the ecosystem, and incorporate the principles as well as practices of ecology into

development programmes/projects (Dasmann et al 1972). This point was made to the global community during the World Conference on Environment and Development, WCED that led to the publication of the proceedings as the book entitled "Our Common Future (WCED 1972).

The early 1990s saw the up-scaling of environmental sustainability in development discourse. The Environment Conference organized in Brazil's city (Rio de Janeiro) in 1992 marked the raising to a higher pedestal of the global meeting aimed at achieving binding agreements regarding environmental and/or ecological matters. Some examples include various Conventions [Note 3]: such as those focusing on Bio(logical) Diversity; Trade in Prohibited biological items (e.g. Ivory), etc. Post-Rio conferences have deepened the coverage of environmental challenges. For example, to curtail the amount of green-house-gas (GHG) emission, the UN Framework Convention on Climate Change (UNFCCC) was formulated. Later, in 2007, the Clean Development Mechanism (CDM) came into force and are expected to be replaced by other instruments/mechanism. This is similar to the way the Millennium Development Goals (MDGs) are expected to be replaced by the Sustainable Development Goals (SDGs) as the post-2015 path towards sustainability. Since this study is cross-cutting, it is high time we turned towards the concepts of administration that the publics deserve to be treated to.

The environment, its sub-systems, ecosystem/biosphere, crises and management. This term has been simply defined as all the things that surround us. We need to correct this and add here that the environment includes all the things that support us. The latter has usually been used with reference to the solid (and not so solid land –including water courses such as rivers and streams that occur in combination with the more abundant land. These constitute only some parts of the environment that we use for numerous purposes: building houses, workplaces, recreational playgrounds, parks, and undertake all sorts of activities and purposes. As the latter statement suggests, the environment is subdivided into three major subsystems. The already described land component is described as the lithosphere; the water bodies (oceans, seas) are referred to as hydrosphere and form as much as 70 per cent of the total surface of the earth. The remainder of the environment is the air or more accurately, the mixture of gases that envelop the others, especially the lithosphere and hydrosphere, is known as the atmosphere. The interaction of these three subsystems of the environment theoretically (not practically) forms the life-system, the biosphere. Bill Adams suggests that this is the subsystem that the ecosystem is located.

The biophysical environment forms the region of interaction between living organisms (flora and fauna) thus the biological environment and the physical environment together forming the biophysical sphere (Gregory et al 2009). Later, it shall be demonstrated that socio-economic activities and their consequences or impact on the biosphere happens on these three or four subsystems to different degrees. Therefore, the monitoring, mapping and remediation of environmental crises and degradation that usually follow, various workers and groups e.g. WRI, UNEP, among others, present their reports along these three subsystems. Crises (risks, hazards and disasters) occur on the environment are more clearly observed, mapped, discussed by people concerned with various aspects of the environment (resources, conservation, degradation, management, etc) along these major subsystems. Therefore, public administration concerns must engage the environment by applying these concepts and perspectives.

Management of environmental crises. This involves the design and application of plans comprising actions, activities (usually packaged as programmes/projects) capable of restoring any damage to the environment and/or components of its subsystems to the near original status of the ecosystem. This management differs from the usual or ordinary one undertaken in other economic activities by the conscious effort to incorporate the biospheric and environmental principles into human pursuit of socio-economic activities aimed at achieving particular objectives.

Administration: public and private. The implementation of war and conduct of other myriad duties and responsibilities of any nation-state requires the practice of organization of activities aimed towards reducing the cost of materials and actions necessary to achieve objectives, targets set as means of realizing overall goals. Categorised under two broad headings (private and public), administration is usually put under many variable subheadings, also as a means of facilitating their achievement. Below, we present a summary of some common administration types. As individuals or as other persons or family units –as in a household, administration is conducted privately. In contrast, public administration is concerned with addressing challenges of nation-states, corporations of both smaller sizes as well as large ones including those of a multi-national character or mega-corporations. In this "urban age", an age of enormous migration, commerce, among other socio-cultural and economic processes, countries commonly possess large and increasing populations that frequently vary in terms of their natures, cultures, traditions, religious beliefs, among others. Since administration is concerned with catering for the various peoples' needs or affairs, it must necessarily involve devising ingenious means of identifying the unique, peculiar or specific of the different people or groups as a way of effectively meeting same. One of the common organizational strategies of public administration is to create institutions and methodologies/methods that strive towards merging challenges to be addressed. The latter method (of integrating institutions and their objectives) is a management/administrative strategy that seeks to reduce costs usually incurred in the process of achieving the set objectives, targets (Table 1).

Table 1
Some sub-headings that commonly focus in public policy and administration

	Sub-headings, activity areas
Public policy and administration generally	War, a means of sustaining the existence of nation-state, maintaining its territorial integrity, security, peace and to a lesser extent, harmony among constituents of the state Energy supply: electricity (power, fuels comprising non-renewables and sustainable energies, among others Economic policies Religious Cultural e.g. tourism Environmental e.g. EIA Foreign relations/affairs e.g. with xenophobia-prone South Africa Review other public administration systems of Sub-Saharan African nations e.g. Nigeria (Adamolekun 1999)

Sources: several e.g. adaptation of Igwe, 2005 and experience of Nigeria, FR over 20 years.

Administration is usually undertaken by fortifying responsible institutions and the persons put in place within them with authority. The latter arises from law (legal instruments, codes, among other things) that seeks to empower all involved to posses the power to act on behalf of the entity in-charge -either the nation-state or the corporation. Here, we are concerned with public administration pertaining to the nation-state. By dong so, we are not suggesting that administration of other publics such as corporations is not important but are aware of the enormous public administration challenges of numerous Developing Countries (DCs), including Nigeria, that the United Nations (UN) has been dedicated towards bailing out of their troubles. Administration strives towards effectiveness by creating a robust system of applying sanctions to offenders and violators as well as rewards or commendations to high conformists or observers of the rules and regulations. The scales or level of sophistication of administration has increased in ways that could be said to be commensurate with the increasing population of nation-states, their cultural diversity i.e. frequently multiple, needs (basic and higher order), among other requirements.

Policy: public and private. Policy is a correlate of administration. Following identification of desirable things or scenarios, public entities proceed towards deciding what (ways, strategies, actions, activities, judgments, rewards, sanctions, among other measures) that must be undertaken in the pursuit of specific objectives, targets and goals. Therefore, policy encapsulates these decisions and other elements of the strivings towards achievement of the objectives of public administration. As varied as human needs have become for groups (regions, classes, ethnic nationalities e.g. indigenous people), so have specific policies been evolved as if to meet each an every group at their points of need. As earlier stated, we shall not be very concerned with the policies of private entities here.

Policy formulation (making). This activity involves acknowledging the degree of spread of issues, characteristics of the area or region for which policy is being created. It involves assessment of the environmental setting, differentiating between those policies that are necessary for a stratum of the population from those necessary for a wider and all the society or the state, for which the policy is necessary, among others. Sometimes, experts involved undertake and justify policy integration referring to the combination of almost all policy strands into a unified one. A nation-state might possess the following variables (dimensions) for which specific policies would be required: economic, social/cultural, ideology, psychological, military/security, developmental needs, and so forth. It might be clearer to expatiate on the economic dimension by improving our organization of the foregoing dimensions through elaborating same. For example, the economic dimension (sector) could include agriculture, industry, commerce/trade, and so on. One point is clarified at this juncture that policymaking is multi-level: some policies could be wide and encompassing while others could be more specific. The larger policies could be subdivided into smaller bits and *vice versa*. At this juncture, we could examine some of the policy specific dimensions in Nigeria. In doing so, some of the existing institutions – usually called ministries, departments and agencies - that have been carrying out various administrative functions by governments at federal, state, and local governments, could serve us as useful guides.

Understanding environmental crises/management associated with public administration: aetiology and descriptive case study methods. Aetiology, a method that resembles causation enabled us to link the study objectives to both the evolution of policymaking paradigms (socio-economic development, and sustainable development as well as public administration and public policy – as an academic field of study and a professional practice area, through the 1960s to the nearest present, 2015 (Ingwe 2005). The descriptive case study method helped to ensure that one of the many Developing Countries, Nigeria, was examined as a means of observing some of the environmental management action areas at the local scale as almost always advocated after global agreements in form of many conventions on the management of the global environment (Ogunniyi 1992).

Recent global challenges and the place of the environment and crises (their dimensions) related to them. This subheading entails moving public policy away from the level of the nation-state toward the global level generally i.e. every issue the environment specifically and its management. Of the 34 global issues identified, 30 bifurcated with the environment either directly or indirectly. As Table 2 indicates, more specific elaborations could clarify the justification of the advocacy for greater interest of public administration on the environment. Increasing population growth has been leading to pressure on available natural and cultural resources including urban areas and facilities provided. By 2007, the proportion of the global population living in urban areas/centres became equal to those residing in rural areas. Afterwards, the proportion of urban residents surpassed their rural counterparts thereby leading to the complication of public urban administration (Ingwe 2012). When global sea level rises, it is hard to tell where "the trigger was squeezed" i.e. which GHG emitter led to the disaster. Although, mega-gas flaring in Nigeria's Niger Delta contributes to the challenge, some argue that the

international oil companies (IOCs) that have been perpetrating this crime over the past six decades originated from the global North and ought to have been held to account. The ozone layer depletion has been attributed to the large-scale use/burning of hydrocarbons for meeting energy needs by global North member-states, who have been recognized as the greatest GHG emitters (Ingwe et al 2010). This has not happened yet.

Table 2

Summary of global issues and their bifurcations with the environment

Challenge (type)	Sub-system affected	Challenge (type)	Sub-system affected
1. Climate change	Lithosphere	2. Fresh water scarcity	Lithosphere, hydrosphere
3. Deforestation and desertification	Lithosphere	4. Fresh water pollution	Lithosphere, hydrosphere
5. Poor governance	Lithosphere, culture	6. Biodiversity loss/reduction	Lithosphere
7. Population growth (increasing pressure on natural and cultural resources)	Lithosphere	8. Dynamics (changing) social values	Lithosphere
9. Waste disposal	Lithosphere	10. Air pollution	Atmosphere
11. Soil degradation	Lithosphere	12. Ecosystem degradation	Biosphere
13. Chemical pollution	Lithosphere	14. Rapid urbanization (facilities and other shortages)	Biosphere
15. Ozone depletion	Atmosphere	16. Increasing energy needs/declining or inadequate supply	Biosphere
17. Emerging diseases e.g. *Ebola* (West Africa, 2014)	Biosphere	18. Natural resource depletion	Biosphere, lithosphere
19. Food insecurity	Biosphere	20. Biochemical cycle disruption	Biosphere
21. Industrial emissions	Lithosphere, biosphere	22. Information technologies	Biosphere
23. Wars and conflicts e.g. *Boko Haram*	Biosphere	24. Immunity decline (reduced resistance to diseases (many are associated with the environmental subsystems)	Biosphere
25. Invasion by species	Biosphere, lithosphere	26. Genetic (bio)engineering	Biosphere
27. Marine pollution	Hydosphere, biosphere	28. Fisheries collapse	Biosphere
29. Ocean circulation	Hydrosphere	30. Coastal zone degradation	Biosphere
31. Space debris	Atmosphere	32. Persistent/increasing bio-accumulative toxins	Biosphere
33. *El Nino* effects	Hydrosphere, biosphere	34. Sea-level rise	Hydrosphere

Source: Ingwe & Edino(2015) adapting Global Energy Network Institute (GENI) 2014; UN (no year/date); Joel (2014).

Climate congress. One of the numerous global Conferences held in March 2009, University of Copenhagen, Denmark. We prepared a contribution to the discussion: "Nigeria's Response to climate change and (sub)regional leadership in climate change mitigation and adaptation in West Africa" (Ingwe 2009). The conference website enables readers to understand the variety, nature and perspectives of issues raised at the event (http://climatecongress.ku.dk/programme/detailed_programmes/2009-03-031finalprogrammepostersessions.pdf). Some issues that underlie the climate-environmental politics at global conferences were recently mentioned with references to Africa's unequal –in fact discriminated against- position and circumstances in the existing political-economic order (Ingwe 2013).

Why politics matters here. The particular interest(s) referring to the selfish gains individuals and groups: be they sub-national entities, or a collection of nation-states, or others) stand to gain concerning their interaction with rivals (or entities) in considering the actions that must be jointly taken in order to safe-keep the global environment, conditions the politics that results. As the Table 2, showing various global issues reveals, each of the issues and global discussions and resolutions concerning them resonate differently with various nation-states as well as the individuals and groups forming the latter and contribute ideas to shape their character. Public administration must deal with these developments after appreciating them.

It is observed that the environmental challenges also bifurcate with the other global problems thereby making it to be even more important than currently evaluated and rated. There are other specific issues. For example, the proportion of people/population living in urbanized places compared to their counterparts inhabiting rural (non-urbanised) areas reached and surpassed the 50 per cent mark in 2007. Considering that the rate of urbanization has been on the rapid increase long before the 2007 balancing out, it would be correct to think that the proportion of the world's urbanized areas and its population has since 2007 increased further (Ingwe 2012).

The huge bifurcations of most global issues with the environment makes its study a requirement for all but especially persons who aspire to function in public administration capacities at various scales: globally, internationally and (sub-)nationally. It is to meet the latter need for knowledge, information and skills that the course entitled "Politics of global environmental management", merits a place. The course is a two-unit activity, is justified as one of those required for the award of the degree of Bachelor of Science (B.Sc.) in the Bachelor of Public Administration (BPA) specialization offered in the Department of Public Administration (DPA), University of Calabar (UniCal). Both are recognized by the National Universities' Commission while two options of the degree course are available or offered to students. One is NUC-owned. The other is managed by the Centre for Educational Services (CES) of UniCal but compulsorily conforms to the NUC regulations.

Conclusions. This paper has introduced and highlighted the way global environmental challenges and management of crises associated with them that had constituted matters that increasingly cause politicization of issues. To launch the discussion of the basic and deeper issues, we have presented materials relevant to the achievement of those general and specific objectives. As the degree course in public administration earlier mentioned states, many topics related to and deserving discussion in the course could not be accommodated here because of constraints. Although politics of environmental management has been clarified through some points raised above (e.g. priority issues, Table 2), we are yet to fully elaborate the way issues constitute political matters among global stakeholders in the environmental system. There is need to clarify many aspects of the global environmental crises and management. To name a few, there is need to explicate major performers (such as the UNEP, WRI, and so forth) and global environmental crises (climate change, ocean pollution, etc.) and management strategies. Very significant to this project is the ongoing work of the UNEP concerning regular monitoring of the global environment and annual publication of a series of reports entitled: Global Environmental Outlooks e.g. the fourth release was, GEO_4 (UNEP 2007).

Also related to the UNEP work have been the contributions of the international NGO, World Resources Institute (WRI), which has cooperated with UN agencies/IGOs: United Nations Development Programme (UNDP), United Nations Environment Programme (UNEP), and the UN-supported International Bank for Reconstruction and Development a.k.a. (the World Bank) to engage in other annual publication of reports. Usually entitled "World Resources" by years, these collaborators have used themed titles to communicate with the global communities. In the early 2000s, the spoke of the ecosystem as the outcome(s) of relationships between people and environment and warned of the way the web of life had frayed (WRI, UNDP, UNEP, World Bank 2000).

They followed on by examining the way key "(D)ecisions for the Earth" were being taken by stakeholders (especially civil society) who strive towards creating or using "Balanace, Voice, and Power" concerning issues that need action (WRI, UNDP, UNEP, World Bank 2003). By the mid-2000s, their focus shifted towards the way the environment and ecosystem constituted "(T)the Wealth of the Poor", as well as the way the poor were "Managing Ecosystems to Fight Poverty". Their work and publication continue to address other relevant issues. These publications have commendably discussed –and remain dedicated toward discussing- global environmental crises and management strategies and challenges. Therefore, as the subtitle of this article would suggest, this could only be correctly be considered as a preliminary report of the subject matter: politics of global environmental management. Undeniably, many relevant issues could not be accommodated here due to space constraints and would be addressed in other articles. Further essays would address the matters raised above. This discourse shall continue later with elaboration of some of the foregoing subheadings such as the role of civil society in contributing towards sustainable development.

References

Adamolekun L., 1999 Public administration in Africa: main issues and selected country studies. Westview press, Oxford, 1999, 415 p.

Adedeji A., Rowland L. (eds), 1972 Management problems of rapid urbanization in Nigeria (Ile-Ife: University of Ife Press). Centre for Research and Action on Developing Locales, Regions and the Environment (CRADLE), the (2006). Accessed 12 March, 2006 at: www.academic.edu/ngcradle.org.

Dasmann R. F., Milton J. P., Freeman P. H., 1972 Ecological principles for economic development. John Wiley, London.

Department of Public Administration (University of Calabar), 2013a Revised Handbook: B.Sc. Public Administration (NUC Programme) – that came into force "with effect from the 2013/2014 Academic Session". Calabar: Department of Public Administration (University of Calabar): Department of Public Administration (University of Calabar, 63.

Department of Public Administration (University of Calabar), 2013b Revised Handbook: B.Sc. Public Administration (C.E.S. Programme) – that came into force "with effect from the 2013/2014 Academic Session". Calabar: Department of Public Administration (University of Calabar): Department of Public Administration (University of Calabar), 67.

Environment & Urbanisation (Editorial), 2015 "Bulletin Board". London: IIED.

Global Energy Network Institute (GENI), 2014 Global issues. San Diego, California: GENI. Retrieved 3 June 2015 from: http://www.geni.org/globalenergy/issues/global/index.shtml.

Gregory D., Johnston R., Pratt G., Watts M. J., Whatmore S., 2009 The dictionary of human geography. Chicester: Wiley-Blackwell, pp. 196-204.

Harvey D., 1973 Social justice and the city. Johns Hopkins University Press, 336 pp.

Ingwe O., 2005 Politics and globe dictionary. Aba: Eagles Publishers.

Ingwe R., 2009 Nigeria's response to climate change and (sub)regional leadership in climate change mitigation and adaptation in West Africa. Poster for presentation at 14.15-14.25, p. 58.21 Climate Congress/Conference, Wednesday 11 March 2009, University of Copenhagen, (Denmark). Retrieved 29 April 2014 from: http://climatecongress.ku.dk/programme/detailed_programmes/2009-03-031finalprogrammepostersessions.pdf.

Ingwe R., 2012 Urban health and welfare in sub-Saharan Africa: population growth, urbanisation, water/sanitation services, slumisation and poverty. Romanian Review of Regional Studies (RRRS) 8(1):17-30.

Ingwe R., 2013 Climate change policy issues in Africa: an agenda for researching integrated climate change mitigation and adaptation and sustainable development programmes at multiple levels/sectors. Badania Fizjograficzne nad Polska Zachodnia (R IV Series A, Geografia Fizyczna) 2013: 67-90.

Ingwe R., Edino, 2015 Politics of global environmental management: a course outline. University of Calabar.

Ingwe R., Ojong F. E., Ushie E. M., Mboto W. A., 2009 Improving sustainable urban development through energy transition in Nigeria. The IUP Journal of Governance and Public Policy 4(3-4):28-47.

Ingwe R., Ebegbulem J. C., Ikeji C. C. C., 2010 Ecocentric and anthropocentric policies and crises in climate-environment, finance and economy: implications of the green policy of the Obama Administration on Africa's sustainable development. African Journal of Political Science and International Relations 4 (1):001-012.

Izeogu C. V., 1984-7 Lecture notes and professorship in various Human Geography and interdisciplinary social sciences, University of Port Harcourt.

Joel O., 2014 Environmental challenges and climate change impacts. Presentation at EEI, MSc. degree course in Petroleum Economics, Management and Policy, UniPort. 2013/4 year. Choba: Port Harcourt.

Ogunniyi M. B., 1992 Understanding research in the social sciences. Ibadan: University Press PLC, 132 pp.

UN-DESA (UN Department of Economic and Social Affairs), 2015 Joint call for nations to invest ahead for people and planet. Accessed 4 June, 2015 from: http://www.un.org/en/development/desa/newsletter/desanews/feature/2015/06/index.html#14809.

UNEP, 2011 Towards a green economy: pathways to sustainable development and poverty eradication. UNEP. Retrieved 8 April. 2013 from: http://www.unep.org/greeneconom.

UN (no year/date), Global issues. Accessed 3 June, 2015 from: http://www.un.org/en/globalissues/.

UNEP, 2007 Global environment outlook (GEO 4): environment for development. Valletta: Progress Press Ltd.

UNEP, 2008 Atlas of the African Environment. Nairobi: UNEP.

World Conference on Environment and Development, WCED, 1972 Our Common Future. Stockholm: WCED.

WRI (World Resources Institute), 2006 World's GHG emissions flow chart. Available on the internet at: http://cait.wri.org/figures/WorldFlowChart.pdf.

WRI, UNDP, UNEP, and World Bank, 2005 World Resources 2005. Managing Ecosystems to Fight Poverty. Washington, DC: World Resources Institute.

WRI, UNDP, UNEP, and World Bank, 2003 World Resources 2002-2004: decisions for the earth (balance, voice, and power). Washington, DC: World Resources Institute (WRI).

WRI, UNDP, UNEP, World Bank, 2000 World Resources 2000-2001. People and ecosystems - the fraying web of life (Companion book to Bill Moyers Reports: Earth on Edge). Washington, D.C.: WRI.

NOTES

[1] ES (Gregory et al 2009) explains that 1995 and afterwards (i.e. Post-1945) officially marks the end of and departure from previous era of colonialism creation of nation-states imbued with autonomy over each of their national territory possessing distinct boundaries, the power of each nation-state to undertake the management of their economic planning, implementation of programmes/projects, among others.

[2] Environmental crises referring to the myriad challenges that afflict it prompt the need for management methodologies, methods, techniques to be created and applied to remedy the life sustaining resource base of humankind and the ecosystem.

[3] A Convention is a legal mechanism comprising agreements, strategies for resolution, targets to be met, appropriate sanctions and rewards, all distilled from discussion (frequently series of them) concentrating on the nature and scale of challenges concerning particular areas of life.

Author:
Richard Ingwe, Institute of Public Policy and Administration (IPPA), University of Calabar, P.M.B. 1115, Calabar, Nigeria, e-mail: ingwe.richard@gmail.com; cradle.africa@gmail.com
How to cite this article:
Ingwe R., 2015 Politics of global environmental management: involvement of public administration and key concepts. Ecoterra 12(2):24-35.