From MDGs to SDGs: The need for Global Thinking and Local Actions in the Nigerian Water Sector

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Abstract:
The Millennium Development Goals (MDGs) elapsed in 2015, reports show that the endeavour was a huge success; however, some targets were not achieved in many developing countries, for example “halving the population without access to improved sanitation. This was found to be due to late commencement and low access to funding among others. Water is at the core of sustainable development. Water resources, and the range of services they provide, underpin poverty reduction, economic growth and environmental sustainability. From food and energy security to human and environmental health, water contributes to improvements in social well-being and inclusive growth, affecting the livelihoods of billions. The Sustainable Development Goals (SDGs) which commenced in January 2016 provides another opportunity for Nigeria to ensure that water and related resources are managed in support of human well-being and ecosystem integrity in a robust economy. Sufficient and safe water should be made available to meet every person’s basic needs, with healthy lifestyles and behaviours easily upheld through reliable and affordable water supply and sanitation services, in turn supported by equitably extended and efficiently managed infrastructure. This cannot be achieved if water resources management, infrastructure and service delivery are not sustainably financed, provided and maintained.

Keywords: Water; Sanitation; Sustainable Development; Poverty Reduction; Environment.

1. Introduction
Nigeria was among the 189 countries from across the world that endorsed the United Nations Millennium Declaration in New York in September 2000, which led to the adoption of the eight time-bound Millennium Development Goals (MDGs) and their performance indicators. Despite the strategic importance of achieving the MDGs, the programme, like most government policies implementation, suffered a very slow start as a result of issues bordering on political will, access to financing, among others. The implementation of the MDGs in Nigeria began when the Federal Government pledged to apply the savings from the Paris Club Debt Relief Deal in 2005 to pro-poor programmes and projects (OSSAP-MDG, 2015). Several policies, programmes, and projects have thus been implemented as a result of savings from the external debt relief, with direct impact on the MDGs. The MDG end-point report indicated that Nigeria had made appreciable progress in the attainment of the MDGs in the last 15 years, particularly, in the area of universal primary education enrolment; achieving gender parity in education; reducing the spread of HIV and AIDS; reducing maternal deaths, ensure environmental sustainability, as well as, halving the percentage of people living in absolute hunger for which it received a recognition from the Food and Agricultural Organisation (FAO) in 2013 (OSSAP-MDG, 2015). In spite of the appreciable progress, some of the targets could not be met due to challenges in the areas of poverty, insecurity, social inequality, absence of inclusive growth and youth unemployment. It thus means that the MDGs implementation in Nigeria remains an unfinished business that needs to be rolled over to the successor Sustainable Development Goals (SDGs) framework.

The aim of this paper is to sensitize government officials, policy makers, managers, researchers and the public on lessons from MDGs implementation in Nigeria and the need to mainstream
SDGs into our current development planning with particular emphasis on the Nigerian water sector.

1.1 Nigeria Country Status on MDGs Implementation

The environment for implementation of the MDGs in Nigeria has been characterized by a mix of risks and vulnerabilities with implications for the attainment of the MDGs. They included both local issues as well those predicated on the global environment; hence: oil price volatilities, the Niger Delta Crisis, the Boko Haram insurgency; flooding; as well as farmers/herdsmen clashes. Whereas most of the vulnerabilities and risks have endured, a few have diminished in importance with time, but collectively, they have all contributed to slowing down Nigeria’s progress with the MDGs (OSSAP-MDG, 2015). Table 1 shows the country status as at the end of MDGs implementation in 2015.

Table 1: Nigeria’s 2015 Country Status on MDGs.

<table>
<thead>
<tr>
<th>Goal</th>
<th>Details</th>
<th>Performance indicator</th>
<th>Status</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Eradicating extreme poverty and hunger</td>
<td>Strong progress made</td>
<td>33.1% Poverty Incidence (2013)</td>
<td>Goal not met</td>
</tr>
<tr>
<td>2</td>
<td>Achieve universal primary education</td>
<td>Appreciable progress</td>
<td>66.7% Literacy rate (2014)</td>
<td>Goal not met</td>
</tr>
<tr>
<td>3</td>
<td>Promote gender equality and empower women</td>
<td>Strong progress in gender parity, weak progress in women empowerment.</td>
<td>37.7% contribution to labour force (2014)</td>
<td>Goal not met</td>
</tr>
<tr>
<td>4</td>
<td>Reduce child mortality</td>
<td>Strong progress made</td>
<td>Fell short of goal by 28%</td>
<td>Goal not met</td>
</tr>
<tr>
<td>5</td>
<td>Improve maternal health</td>
<td>Maternal mortality target met, and strong progress made on other indicators.</td>
<td>243 deaths per 100,000 live births (2014)</td>
<td>Goal not met</td>
</tr>
<tr>
<td>6</td>
<td>Combat HIV and AIDS, malaria and other diseases</td>
<td>Appreciable progress in combating HIV and AIDS, but weak progress in other diseases</td>
<td>Nil</td>
<td>Goal not met</td>
</tr>
<tr>
<td>7</td>
<td>Ensure environmental sustainability</td>
<td>Strong progress in the provision of safe drinking water, weak progress in other indicators</td>
<td>67.0% access to safe drinking water (2015) 29% access to improved sanitation (2015)</td>
<td>Goal not met</td>
</tr>
<tr>
<td>8</td>
<td>Develop a global partnership for Development</td>
<td>Nil</td>
<td>Nil</td>
<td>Goal met</td>
</tr>
</tbody>
</table>

(Source: OSSAP-MDG, 2015)

From the foregoing, it appears that Nigeria had made appreciable progress in the implementation of the MDGs, but 88% of the goals were largely unmet as elucidated in Table 1. Hence the country cannot be said to have a pass mark in the implementation status, thus leaving a huge gap and something to direct future policy thrust towards. According to UNECA et al. (2015), the MDGs have helped focus the efforts of governments and development partners on pressing issues in human development globally; the Goals have underscored the power of communication in galvanizing global action and resources around a core set of development objectives, and establishing the role which global partnerships can play.

Access to good quality water is central to human livelihoods; Nigeria has made appreciable progress in improving households’ access to safe drinking water with an end-point status in 2015 at 67% access. The country is also deemed to have done well on this indicator from the statistics of the Joint Monitoring Programme (JMP)/United Nations Children’s Fund (UNICEF) and
World Health Organization (WHO) indicating the recorded end-point status of 69% in 2015. There are wide disparities in access to safe drinking water across many states, with those in the southern part of Nigeria having higher access than those in the north (OSSAP-MDG, 2015).

The success recorded in the provision of safe drinking water has, however, not been witnessed with respect to the proportion of the population using improved sanitation facilities. The endpoint status of only 41% using improved sanitation facilities in 2014 is not encouraging and in fact, suggests weak progress in this indicator. The JMP estimate is even worse here, as it recoded 29% for this indicator in 2015. The percentage of the urban population living in slums has been on the decline since 1990. From a baseline figure of 77.3% in 1990, it declined to an end-point status of 50.2% in 2014. Although this implies strong progress, the number of persons living in slums is still very alarming and also considering that the number of slum dwellers has been on the rise owing to increasing housing deficits of 16 -18 million units against the reality of growing number of cities with populations of one million and over.

2. Lessons from MDGs Implementation in Nigeria
The MDGs implementation process generated invaluable lessons that can inform policymaking going forward. This is particularly important in the context of the 2030 sustainable development agenda that will build on several elements of the MDGs. While sector-specific lessons can be drawn from each goal; UNECA et al. (2015) advanced some overarching lessons that cut across various sectors as outlined below:

1. Initial conditions are important in achieving and accelerating progress on the MDGs. Differentiated approaches to supporting and evaluating progress are therefore imperative. For countries close to achieving specific targets, incremental progress may not be as relevant as the quality of such progress. Alternatively, for those countries and regions that are furthest from the target, the pace of progress relative to their baselines is a more appropriate measure of performance.

2. Global development agendas are likely to succeed if they are underpinned by a credible and committed means of implementation that takes into account both financial and non-financial resources. The lack of these means rendered the implementation of the MDGs vulnerable to resource shortfalls. A new means of implementation are clearly stated in goal 17 of the SDGs and include capacity building, technology, trade and financial aspects among others.

3. Policymakers must be mindful of the utility and sustainability of their investments. Investments in brick and mortar such as schools and hospitals can be sustainable and useful only if they are matched by complementary investments in recurrent expenditure on teaching materials, equipment, and skilled health professionals.

4. Effective communication and follow-ups are critical for the success of global agendas. Even though the commitments made by its signatories were not binding, the MDGs generated some success. This positive outcome was partly due to the effective communication and continual follow-up processes undertaken at the national, regional and global levels, which helped to sustain pressure on governments to fulfil their social compacts. All these could also be enhanced if adequate global monitoring and reporting is put in place.

5. Sustainability requires addressing the root causes, not the symptoms of underdevelopment. Donor support is more likely to result in sustainable development if it focuses on giving Africa a “helping hand” rather than a “hand out”. The MDG’s focus on outcomes such as poverty reduction without particular attention to the pathway or enablers required to achieve them is ultimately unsustainable.
2.1 The Role of Water in Achieving Sustainable Development

The inter-linkages between water and sustainable development reach far beyond its social, economic and environmental dimensions. Human health, food and energy security, urbanization and industrial growth, as well as climate change are critical challenge areas where policies and actions at the core of sustainable development can be strengthened (or weakened) through water (WWAP, 2015a). Lack of water supply, sanitation and hygiene (WASH) takes a huge toll on the health and well-being of people, and comes at a large financial cost, including a sizable loss of economic activity. In order to achieve universal access, there is a need for accelerated progress in disadvantaged groups and to ensure non-discrimination in WASH service provision. Investments in water and sanitation services result in substantial economic gains; in developing regions, the return on investment has been estimated at US$5 to US$28 per dollar. An estimated US$53 billion a year over a five-year period would be needed to achieve universal coverage – a small sum given this represented less than 0.1% of the 2010 global GDP (WWAP, 2015a).

The increase in the number of people without access to water and sanitation in urban areas is directly related to the rapid growth of slum populations in the developing world and the inability (or unwillingness) of local and national governments to provide adequate water and sanitation facilities in these communities. The world's slum population, which is expected to reach nearly 900 million by 2020, is also more vulnerable to the impacts of extreme weather events (UN-Habitat, 2010). It is however possible to improve performance of urban water supply systems while continuing to expand the system and addressing the needs of the poor. Future projections show that by 2050, the agricultural sector will need to produce 60% more food globally, and 100% more in developing countries (Alexandratos and Bruinsma, 2012). As the current growth rates of global agricultural water demand are unsustainable (WWAP, 2015a), the sector will need to increase its water use efficiency by reducing water losses and, most importantly, increase crop productivity with respect to water. Agricultural water pollution, which may worsen with increased intensive agriculture, can be reduced through a combination of instruments, including more stringent regulation, enforcement and well-targeted subsidies and the implementation of the technologies that ensure the reduction in the usage of fertilizers and other agrochemical products.

Energy production is generally water-intensive. Meeting the ever-growing demands for energy will generate increasing stress on freshwater resources with repercussions on other users, such as agriculture and industries. Since these sectors also require energy, there is a room to create synergies as they develop together (WWAP, 2015a). Maximizing the water efficiency of power plant cooling systems and increasing the capacity of wind, solar and geothermal energy will be a key determinant in achieving a sustainable water supply in the future. The global water demand for the manufacturing industries is expected to increase by 400% from 2000 to 2050, leading all other sectors, with the bulk of this increase occurring in emerging economies and developing countries (WWAP, 2015a). Many large corporations have made considerable progress in evaluating and reducing their water use and that of their supply chains. Small and medium-sized enterprises are faced with similar water challenges on a smaller scale, but have fewer means and less ability to meet them.

The negative impacts of climate change on freshwater systems will most likely outweigh its benefits. Current projections show that crucial changes in the temporal and spatial distribution of water resources and the frequency and intensity of water-related disasters rise significantly with increasing greenhouse gas emissions (IPCC, 2014).

The challenges at the interface of water and sustainable development vary from one region to another. The fundamental aim for Africa is to achieve durable and vibrant participation in the
global economy while developing its natural and human resources without repeating the negative experiences on the development paths of some other regions. Currently only 5% of the Africa’s potential water resources are developed and average per capita storage is 200 m$^3$ (compared to 6,000 m$^3$ in North America). Only 5% of Africa’s cultivated land is irrigated and less than 10% of hydropower potential is utilized for electricity generation (WWAP, 2015a). However the development of this potential need to be done under an integrated management and the assessment of trade off on the impacts that it will create in social, economic and environmental spheres.

3. The Prominent Role of Water in the United Nations Agenda for Sustainable Development

The United Nations Millennium Declaration from which emerged a set of eight MDGs indicated that for the first time, there was a global agreement in which rich and developing countries recognized that they share the responsibility to end poverty and its root causes. For water, the MDGs fostered greater coordination of international development efforts towards improving access to drinking water supply and sanitation.

However, as the MDGs did not derive from a consultative process with a wide range of national-level stakeholders, they have suffered from a perception of being donor centric and being somewhat unbalanced regarding which topics were addressed. For example, no specific targets were included for sustainable water resources management (surface and groundwater), for water quality, pollution, wastewater treatment or for maintaining the roles of ecosystems. Water-related gender and hygiene dimensions were also lacking, as were water-related disasters. Another set of problems with the MDGs stem from the use of proxy indicators (WWAP, 2015a). The target for safe drinking water, for example, was captured by the proxy indicator for using an ‘improved drinking water source’ and important aspects such as the quality, availability and reliability of services were not included. The limited scope of the MDGs has also not prompted developing countries – particularly those vulnerable to emerging challenges such as climate change, food crises and rapidly increasing urbanization – to fully address governance-related issues such as the development of robust government institutions, social welfare systems and an enabling environment for civil society participation (UN, 2012). The outcome document of the 2012 United Nations Conference on Sustainable Development (Rio+20), The Future We Want, recognized that ‘water is at the core of sustainable development’ and its social, economic and environmental dimensions (UN, 2012).

Water’s fundamental importance for human development, the environment and the economy needs to feature prominently in the new post-2015 development agenda. In 2014, UN-Water recommended a dedicated SDG for water with five target areas namely: (i) WASH; (ii) water resources; (iii) water governance; (iv) water quality and wastewater management; and (v) water-related disasters. A dedicated water goal would create social, economic, financial and other benefits that greatly outweigh its costs (UN-Water, 2014). This recommendation helped inform discussions of the UN General Assembly Open Working Group (OWG) on Sustainable Development Goals. In September 2014, the General Assembly adopted a resolution on the final report of the OWG on SDGs, containing 17 goals (See figure 1), one of which is a dedicated goal on water. The General Assembly (GA) decided that the proposal of the OWG on the SDGs “shall be the main basis for integrating sustainable development goals into the post-2015 development agenda, while recognizing that other inputs will also be considered in the intergovernmental negotiating process at the 69th session of the GA” (UNGA, 2014).

The SDGs, approved by the UN General Assembly in September 2015, came into effect on 1 January 2016 and have the objective of guiding international development and cooperation for the next 15 years. According to the document, these are aspirational goals, intended to provide a
reference for setting national priorities, in rich and poor countries alike (UNGA, 2015). The SDGs present another opportunity for developing countries especially Nigeria to consolidate on the gains of the MDGs and take advantage of international goodwill to facilitate further enhancement of livelihoods and improved infrastructures. As can be seen in Figure 1, water now has a dedicated goal (SDG 6) giving it a very prominent role in the global development agenda; it should however be observed that water has an indirect role to play in six other goals (Goal 2, Goal 3, Goal 11, Goal13, Goal 14 and Goal 15); thus, the interconnections between water and sustainable development cannot be overemphasized.

The elements of goal 6 are carefully elucidated in Box 1; implementing agencies must clearly understand the context and mainstream them into current development planning. Further, follow up mechanisms need to be put in place for appropriate monitoring and reporting of every event, in order to measure the progress made at every project milestone.

Figure 1: Sustainable Development Goals (https://www.youtube.com/watch?v=5G0ndS3uRdo)
### Box 1:

**Goal 6: Ensure availability and sustainable management of water and sanitation for all**

- **6.1** By 2030, achieve universal and equitable access to safe and affordable drinking water for all.
- **6.2** By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations.
- **6.3** By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.
- **6.4** By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.
- **6.5** By 2030, implement integrated water resources management at all levels, including through Trans boundary cooperation as appropriate.
- **6.6** By 2030, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes

#### 6.a By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies.

#### 6.b Support and strengthen the participation of local communities in improving water and sanitation management.

Source: UNGA (2015)

### 4. Agenda Setting for Local Action towards Implementing SDG’s Goal 6 in Nigeria

The global agenda of the SDGs will need to be integrated with national processes, within the government (vertical integration) and between government and stakeholders (horizontal integration) (WWAP, 2015b). The United Nations General Assembly encouraged all Member States to develop ambitious national responses to the implementation of the SDGs, building on existing planning instruments and conducting monitoring progress at the national and sub-national levels (UNGA, 2015). Nigeria should not be left out in this quest especially as it affects water. The Federal Ministry of Water Resources (FMWR) is the lead government organ in Nigeria responsible for the development and management of water resources together with its numerous parastatals. There is the need to mainstream SDG 6 into the planning process at this early stage of implementation, noting that, it was a late start in the implementation of the of the MDGs (5 years after commencement) that mainly affected its full implementation.

Adequate resource mobilization needs to be expedited despite the prevailing economic downturn and decreasing revenue from oil based export upon which the Nigerian economy thrives. Increased investment and financial support for water development is essential. When efficiently and transparently managed, investments in water could generate social, economic, financial and other benefits that would greatly outweigh its costs. In addition to adequately financing the development, operation and maintenance of infrastructure, increased funding is also needed in order to develop institutional capacity and ensure well-functioning governance structures. Greater financial support is equally essential to enhance the knowledge base and provide reliable and objective information about the state of water resources, their use and management, to
enable water managers and administrators to inform decision-makers about policy options and their potential impacts. One of the challenges of the water sector in Nigeria is the current state of water data infrastructure and management, the climate change phenomenon has greatly underscored the dire need to have a state of the art data infrastructure; data should be integrated, analysed and converted into useful information for policy-makers, the general public, managers and researchers.

The 2000 National Water and Sanitation Policy defined clear roles for the various levels of government. The three levels of government – federal, state, and local – in Nigeria share statutory responsibility for the delivery of water supply and sanitation services and have been directly involved in water supply and sanitation through government response to community demand through elected representatives. The Federal Ministry of Water Resources is responsible for policy formulation, data collation, resources and demand surveys, monitoring, evaluation and the coordination of water supply development and management, and the creation of an enabling environment for meaningful private sector participation among others. The state water supply agencies on the other hand, are responsible for the establishment, operation, quality control and maintenance of urban and semi-urban water supply systems. They are also responsible for licensing and monitoring private water supply and for monitoring the quality of water supply to the public as well as providing technical assistance to local governments. Local governments are responsible for the establishment, operation and maintenance of rural water supply schemes in conjunction with the benefiting communities. They also have the responsibility to establish, equip and fund the Water and Environmental Sanitation (WES) departments.

In reality however, coordination between the three tiers of government is very weak, particularly when it comes to project implementation. Most Local Government Areas (LGAs) do not have stable revenue bases and so cannot contribute meaningfully to the sharing of costs, nor do they have the capacity to plan and implement the projects (WaterAid, 2006). Even at state level, only 23 of the 36 states have established rural water supply and sanitation agencies in line with the national policy. The link between the sector institutions is very weak. The agencies across the three tiers of government only consult once a year through the National Council on Water Resources (NCWR). It is advisable that the meeting of the council should hold quarterly and the membership be expanded to include LGAs if the implementation of the SDGs must be holistic.

In recent times, delays in the passage of annual appropriation bills has been widely reported, this in turn, delays the release of funds to statutory governments and institutions for implementation of planned projects. Cases have been reported of funds getting to the relevant spending agency only in the last quarter of the financial year, too late for judicious spending (OSSAP-MDG, 2015). Few states have taken the Federal government to court over the release of allocated revenue at one time or the other. Some Local governments also had to take their States to court in this respect and over the issue of deductions from budgetary allocations (Anonymous, 2017). New legislation through constitutional amendments is required in order to overcome these problems and ensure financial independence for all the tiers of government.

5. Conclusion
The paper has elucidated the performance of Nigeria in the implementation of the MDGs, while good success has been achieved in the area of policy instruments and some specific targets; a vast majority of the targets were not met. Some of the reasons alluded to this is the slow commencement, low political will, access to financing, oil price volatilities, the Niger Delta Crisis, the Boko Haram insurgency, flooding as well as farmers/herdsmen clashes among others.

The Inter-linkages between water and sustainable development reach far beyond its social, economic and environmental dimensions. Human health, food and energy security, urbanization
and industrial growth, as well as climate change are critical challenge areas where policies and actions at the core of sustainable development can be strengthened (or weakened) through water. Lack of water supply, sanitation and hygiene (WASH) takes a huge toll on health and well-being and comes at a large financial cost, including a sizable loss of economic activity. The challenges that faced MDGs implementation are still very much in place, though gradually winding down; this gives an ample opportunity for the steady commencement of the SDGs. Nigeria should take advantage of an early start by holding a National stakeholders meeting to sensitize all arms of government and the public on the commitment made at the United Nations. As a matter of National priority, all monetary allocations should be tagged to the SDGs and a robust monitoring and reporting mechanism established alongside.

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Sobowale and Ortigara; From MDGs to SDGs: The need for global thinking and Local actions in the Nigerian water sector. AZOJETE, 13(5):620-629. ISSN 1596-2490; e-ISSN 2545-5818, www.azojete.com.ng


