

Health Impact Assessment: Expanding Public Policy Tools for Promoting Sustainable Development Goals (SDGs) in Nigeria

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Abstract

Being able to predict the probable health impact within a population and its dispersion, arising from a policy, program, or project is indispensable. To achieve this, a blend of procedures, methods and tools is usually utilized. This is the core definition of a Health Impact Assessment (HIA). Note that by shifting focus more broadly to "potential effects on health," including both positive and negative effects, interventions can be evaluated beyond simply risk or hazard reduction. Thus, HIA can be a useful tool for stakeholders when considering multiple outcomes to be optimized to attain population-wide benefits. Also, the HIA framework encourages the analysis of synergistic pressures on environmental public health. Stakeholder concerns are variable across multiple criteria but can generally be grouped into (a) quality of life, (b) political, (c), economic or (d) moral concerns. Therefore, key components that are important to the development partners and multi-stakeholders HIA process include sustainability, equity/democracy, and ethical use of evidence. Hence, public health is central to all these stakeholder interests. Health is essential to the quality of life, viewed by many as a fundamental human right, and is central to many economic impacts and political actions. The principles of HIA are therefore clearly suited to considering the full set of implications of any of the range of policy options that could affect health in association with environmental disasters such as drought, desertification, flooding, groundwater pollution, oil spillage, and climate change, etc. However, the need for policymakers, development partners and relevant stakeholders to build capacity and engagement will further contribute to the improvement of standards and practical application of these methodologies to such upstream decisions and to pay increased attention to prioritization and economic implications to ensure that the assessments have a true impact on the eventual outcome of decisions and that their true potential is realized through advancing and promoting sustainable development goals especially in this current COVID-19 pandemic.

Keywords: Health Impact Assessment (HIA); Decision Making; Sustainable Development Goals (SDGs); Development Partners; Multi-stakeholder; Policymaking; Nigeria

Introduction

The most unprecedented global pandemic that knows no borders has brought into sharp focus the intersection of government and public health policy, and the unique challenges that Nigeria population face today. As the world faces a pandemic of historic proportions with the worst public health and economic crisis, governments are periodically confronted with an array of time-sensitive policy questions. Although, while we are still learning a lot about the value of Health Impact Assessment and piecing together evidence-based information on how it will affect different populations and communities. There is no doubt that the world is under serious threat from the environment: From China to Nigeria, United State of America and United Kingdom, analysts have argued that the environment was only responding to the abuses heaped on it by man's activities [1,2]. The concern is that the world is almost getting close to extinction because of the pandemic unless urgent actions are taken; and the signs are just too apparent to be ignored [3-8]. Anthropogenic activities and its resulting effect of coronavirus and change in the world's climate, is currently exerting a lot of pressure on the environment [3-5,9-14]. The daunting effects of climate change and its link to social and economic snags bedeviling today's world, prompted the UN's World Commission for Environment and Development to create a concept in 1987 that compels individuals and government to responsibly exploit resources in a manner that will not rob future generations from meeting their own needs. This concept is termed sustainable development [15], the 193 member states of the United Nations, adopted 17 goals in September of 2015. These goals are targeted at, eradicate poverty, protecting the planet and ensuring the prosperity of all mankind. This sustainable development initiative is expected to be accomplished by 2030 [16]. To achieve the goals and objectives, HIA must play a strong prominence in decision support for professionals responsible for creating future solutions, but also for everybody else who, in today's world economy, is both a stakeholder and a decision-maker with a role to play concerning HIA as a consumer, as member of a local community, or as a voter [2,17,20,22]. Individual decisions about what truly defines sustainable development at all levels, must be predicated upon providing tools that are detailed, having the capability of answering their questions. A structured standpoint approach must be employed, if blame trading that often arise whenever solutions to a problem creates new challenges that are usually overlooked or is to be avoided. Assessing routinely and reporting how a Health Impact Assessment (HIA) aims to address health might better manage expectations and help HIA practitioners and users more conscious of how an HIA can realistically be used to advance health especially since it is a terrifying time for us all, which could get much, much worse. However, principles of health, along with related concerns for disparities reduction, protection of vulnerable populations, and respect for human agency, have been a cornerstone of health impact assessment (HIA) [17-20,22]. Therefore, the Health impact assessment (HIA) is a forward-looking, evidence-based tool used to inform stakeholders and policymakers about the potential health impacts of proposed projects and policies and to identify options for maximizing potential health benefits and minimizing potential harm. Similarly, Health Impact Assessment (HIA), which is a blend of several methodologies in the assessment of the possible health impact on a population and its distribution, arising from policies, programmes, or projects is instrumental in linking with other sectors to deal with the root cause of health challenges and thereby fostering the successful actualization of the sustainable development goals, having sprung into prominence in the last few decades [2,17,18,21,22].

HIA is a systematic process for identifying and communicating the potential health-related impacts of proposed projects and policies and formulating recommendations to maximize potential health benefits and minimize potential harm [23]. It combines several multidisciplinary approaches in the assessment of health-related consequences that may arise from a project, policy, and programme that does not clearly define health as is major focus, based of evidences of health effects from a well-structured framework. HIAs application spans over its use in a wide range of situations, such as the appraisal of national policies, infrastructural development, transportation and national/regional agricultural projects. Public participation and interagency synergy are two key positive outcomes; however, the setback is that there no globally accepted methods in the evidence-based health impacts. Despite being a promising emerging practice, it has proven to be a great tool in the understanding of possible human health consequences, thereby informing decision-making and public policies [24-26]. Although HIAs may utilize assessments of current conditions and evaluations of previously implemented projects and policies, they are primarily forward-looking, aiming to provide insights into what is likely to happen under different implementation scenarios.

HIAs also tend to focus more on changes in determinants of health, such as air, noise and water pollution and the availability of healthy foods, and less on corresponding health outcomes, such as rates of respiratory disease and heart disease, that are affected by numerous other causal factors and may not manifest until decades in the future [1,2,10,11,13,14,27-31,33-37,44]. Enhancing the equity of human health, requires making changes in the way issues are being handle relating to our future as it concerns our health. Fortunately, HIA have been recognized as a structured assessment process for plans, projects, policies and programmes in promoting human health [38].

Supporting HIA has increased rapidly in developing countries like Nigeria [1,2,17,20,22] and developed countries such as Canada [39], Europe [40,41], Australia [42] and New Zealand [43], which may not have been surprising, because other initiatives rooted in an environmental approach to public health initiatives, such as Healthy Cities [39] and “healthy public policy”, which have been well received in these countries, unlike in Nigeria, where a narrower, more individualistic approach to Sustainable Development Goals has been more prevalent. Unlike in the past, there have been growing interest in HIA in Nigeria today. With this growing interest, challenges in areas of the ability to handle strategic methodological development, strengthening legal framework promoting HIA, practitioners training, unified global standards organization and funding will have to be looked into. Because the country is more at risk to adverse health impacts governed by social-ecological contexts (for example multidimensional poverty, scarcity of public infrastructure, favorable conditions for the spread of vector and water-borne diseases, high prevalence of infectious diseases and its associated effects to climate change) [9,12-14,30,36,37,44]. At the same time, development in Nigeria is associated with a far-reaching array of potential positive and negative effects on health consequences (e.g. increased rates of HIV or malaria) [30,36,37,44,45] and determinants of health (for example, increased household income, increased public education investment, in-migration and environmental degradation) [13,14,46]. Good management of the potential negative impacts of projects in Nigeria, especially in the Niger Delta holds assurance to improving public health and promoting sustainable development. The following have been identified to be mutually responsible for driving the recent growth in interest in HIA in Nigeria:

1. The growing significance of health and underlying determinants such as fitness service providers as subjects of general interest;
2. The growing link between the effects of the activities of other sectors on public health, and the fact that enhancing the SDGs will be difficult by relying on local public health practices alone;
3. Suggestions from interested stakeholders such as environmental health professionals, real estate developers and other related groups, that health impact assessment will be key in driving their agenda.

Consequently, HIA can be viewed as a concept that combines several methodologies, utilizing a well-designed process which is predicated upon a robust structure that predicts the health of a population based on the population’s economic, political, social psychological, and environmental status Within the context of this definition are five fundamental tools:

1. Attention on suggestions on well-defined policies and projects,
2. A good consideration on the extent of health impact,
3. Utilization of various factors and scopes to achieve favourable response from the public on health,
4. Several methods, methodical review and,
5. A critical methodology based on a combination of procedures from several fields of study,
6. A simple to understand system that is properly organised.

The foundation on which HIA sits is that, if other health related sectors can put health impact assessment into consideration during decision-making, a platform for achieving SDGs 3 will be set, which will improve the health status across all age grades, while ensuring a healthy population in all quarters by 2030 [47]. Several factors such as; the social and political underlying concept of a country conducting the HIA, questions arising from the areas of application about certain policies including education and knowledge of HIA practitioners, and the expectations of participants and sponsors who make use of the outcomes, affects the nature of health assessment. There has been evolution in HIA from its inception. This evolution exists along two very different paths, however, occasionally intersecting [2,17,20,22,48]. Correspondingly, the evaluation of the actions to be taken which have diverse effects on health is dependent on the applied HIA procedures. These strategies can be found in more comprehensive procedures of HIA; however, they have nothing to do with the views of HIA or its policies. In Sweden, for instance, HIA development happens to be the responsibility of decision makers at the local government level. Although, they consider all socio-economic factors associated with health, key concerns are on projects [40,49].

The importance of the role of HIA on the promotion of health in the future should not to be handled with laxity. The COVID-19 pandemic (though ravaging the globe at the moment) has been kind enough to give the world a glimpse of what negligence to informed health impact decisions can result in the future [3-5]. In as much as the world is doing all it can to end this pandemic, this should be a wake-up call to governments across the world in adopting strategies that will promote future health. If we wish to occupy the earth longer, immediate decisive actions must be taken to adapt framework analysis from Olalekan., *et al.* [17], the IFC HIA guidelines [50] and Quigley., *et al.* [51], which comprised 4 health determinant categories (Table 1 below) and 10 health outcome groups.

S/N	Health Determinant Categories	Description
1.	Individual factors	Factors related to the individual’s biology and behavior. These comprise for example gender, age, ethnicity, dietary intake, level of physical activity, tobacco use, alcohol intake, personal safety, sense of control over own life, employment status, educational attainment, self-esteem, life skills, stress levels, resilience and risk behavior.
2.	Social determinants of health	Conditions in which people are born, grow, live, work and age. These include access to services and community (health, education, nutrition, institutional and social support, social and health insurance); income/unemployment rate; distribution of wealth; empowerment of women; sexual customs and tolerance; racism; attitudes to disability; trust; sites of cultural and spiritual significance.
3.	Environmental determinants of health	Physical, chemical, and biological factors external to a person, and all the related factors impacting behaviors, such as exposure to heavy metals, pesticides and other compounds, solvents or spills and releases from road traffic; air pollution (indoor and outdoor); noise pollution and exposure to malodors. It also includes factors, such as inadequate housing, water and sanitation services, and the mixing of population groups with different levels of communicable diseases which can be associated with in-migration.
4.	Institutional factors	Availability of services, including (traditional) health services, transport and communication networks; educational and employment; environmental and public health legislation; environmental and health monitoring systems; laboratory facilities; social and health insurance schemes.
	Health Outcome Categories	
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1.	Communicable diseases related to housing and overcrowding	Transmission of communicable diseases (e.g. acute respiratory infections, pneumonia, tuberculosis, meningitis, plague, leprosy, etc.) that can be linked to inadequate housing design, overcrowding and housing inflation

2.	Vector-related diseases	Mosquito, fly, tick and lice-related diseases (e.g. malaria, dengue, yellow fever, lymphatic filariasis, leishmaniasis, human African trypanosomiasis, onchocerciasis, etc.)
3.	Soil, water and waste-related diseases	Diseases that are transmitted directly or indirectly through contaminated water, soil or non-hazardous waste (e.g. diarrheal diseases, schistosomiasis, hepatitis A and E, poliomyelitis, soil-transmitted helminthiases, etc.)
4.	Sexual and reproductive health	Sexually-transmitted infections such as syphilis, gonorrhoea, Chlamydia, hepatitis B and, most importantly, HIV/AIDS
5.	Veterinary medicine and zoonotic diseases	Diseases affecting animals (e.g. bovine tuberculosis, swinepox, avian influenza) or that can be transmitted from animal to human (e.g. rabies, brucellosis, Rift Valley fever, monkey pox, Ebola, leptospirosis, etc.)
6.	Non-communicable diseases	Cardiovascular diseases, cancer, diabetes, that can be linked to changes in lifestyle, exposure to hazardous materials in air, water or soil, and noise
7.	Accidents/injuries	Road traffic or work-related accidents and injuries (home and project related); drowning; unintentional poisoning
8.	Food and nutrition-related issues	Adverse health effects such as malnutrition, anemia, micronutrient deficiencies or obesity due to e.g. changes in agricultural and subsistence practices, or food inflation; gastroenteritis, food-borne trematodiases, etc.
9.	Maternal and child health	Prenatal, natal and postpartum health conditions, infant and child health and immunization
10.	Mental health	Psychological health conditions linked to resettlement of populations or changes in lifestyles (e.g. anxiety, depression, stress symptoms, suicide)

Table 1: Health determinant categories.

Adapted from Olalekan., et al. 2020; the IFC HIA guidelines, 2009; Quigley., et al. 2006.

Methods

During the 1990s many impact assessment methods evolved, and the ambition has since then been to quantify all relevant environmental impacts, independent of shifting public concerns, with the goal of avoiding burden shifting. To this day, methodological development has continued, and increasing attention has been given to international scientific consensus building on central parts of the HIA methodology, standardization and related approaches. While, the twenty-first century, impact assessment methods have continuously been refined and several methodologies have emerged and are frequently being updated. The first impact assessment methods took into account the often-large differences in the environmental hazards of the individual emissions. Actions to improve the impact assessment is always taken, but not after all requirements have been met and the HIA have been ascertained and the plans and procedures have been examined and carefully built. There is every tendency for HIA to be affected by several factors, hence there is need for an evaluation and comprehensive description. For this reason, one minimum requirement involves ascertaining the health status of the population under review and examining the results to find out what can be implicated for possible health impacts [2,17,20,22,52]. In HIA, one of two approaches are employed for quantitative analysis: descriptive or speculative. Data from quantitative HIA analysis (usually numeric), are only used to explain the connections with organizations and not to develop any form of model to statistically estimate probable impacts of the recommendations. Whenever additional cost can be justified, quantitative data from other health effects may be added into the existing model to help in assessing increasing health effects. Shortfalls usually exist in the estimation tool, information and requirements, hence, cannot be focused on. This is because, trusted tools used in estimation of health effects are depended upon, especially if the benefits cover health and risk estimates [2,17,20,22,53,54]. Although quality data may have been collected, there has to still be a clear definition of unverified facts; careful analysis is invaluable in such cases, however, it should be predicated on sound assumptions This is done to

(a) create a clearer overview of the health, social and demographic challenges in the society of the target population (b) determine the existence of key driving forces that can be responsible for strengthening the policy or program that is being put forward. For instance, in a HIA concerning the physical activity of children, the existing state of physical activities of children have to be put into consideration, while also taking into account other factors like ethnic disposition, educational status, income, and body mass index of the population under review, that have been extracted from scientific literatures and confirmed to serve as a link between environmental effects and a way to schedule the change system of physical activity in children. Compared to other quantitative impact assessments, profiling is a daunting task, however, is it easy to understand. A key challenge is that the applicability of HIA is suited for specified populations, where there is probable in collecting relevant data on health, demography etc. required to cause improvement, validate conformity and make the chosen methodology routine, for instance resident approximation [55]. Several factors of health for the HIA population under review can be employed to enhance the approximation, which is important to HIAs development and spread. The reporting system and difference in views, also helps in strengthening profiling, that hinders its incorporation into models used for prediction. Other contributors in the HIA process such as epidemiologist and evaluators need good supports from HIA professionals and practitioners in reporting the effects of the negative impacts of health impacts, with minimal periodic changes in results, instead of focusing on the foundational measures and the number of variations that makes it suitable for scientific validation. The level of trust for HIA, is predicated upon the authenticity of the facts of the data and its communication.

Notwithstanding the link of HIA to other key sectors, reduces the level of mistrust, and this mistrust linked to several of the economic and attitudinal concerns that affect them. The key focus of HIA is on the effect of exposure and the policy of other sectors [56]. Finding enough facts for a HIA is usually very tasking, especially if the data stored is of very high quality, as with case with most methodological assessment [2,17,20,22,57]. With or without information from HIA, decision-makers will still make decisions, since finding evidence for establishing the foundation behind HIA can be very difficult. Nevertheless, this shortcoming has to be related to all involved in the HIA report, including official notes, which may be the only available source of information for policymakers [1,2,17, 20,22].

Discussion

The value of health impact assessment (HIA)

For large-scale (i.e. category A) projects, the IFC Performance Standards [58] and the World Bank's operational policies [59] further require a full project assessment, including aspects of human health and safety. In addition, several directives and scientific articles promote a comprehensive health system within the HIA, covering the full spectrum of aspects that determine human health [2,20,22,51,60]. HIA informs decisions on how to reduce negative health impacts, it is a remarkable and useful tool to map health impacts and support policy development and concrete decisions, and for a country it can support the development of a positive image. Advocates of increased use of HIA see it as a vehicle for facilitating intersectoral collaborative action and promoting transparency and public engagement on issues affecting the public's health and are highly varied. Each HIA confronts a unique decision context, a set of resource constraints, and a mix of practitioners and stakeholders involved in conducting the HIA. In addition to clarifying approaches to health in HIA practice, this provides a lens for understanding and confronting the challenges of advancing health in other areas of public health practice. As a consequence of this, the quality of decision-making for the public can be enhance in several ways [62,64]. Chiefly, the application of health-related information to proposals in other sectors, can serve as a channel to put "public health on the table". For instance, the following questions can arise from the construction of the proposed Calabar highway; is there a possibility that the construction of the new highway will increase asthma cases in the people living in close proximity to the road? Does this project have to affect commuting and biking routes to and from schools within the vicinity? What consequences does the increase of noise from the construction activities have on the health of the people? Secondly, an unclouded trail has been charted by HIA to examine all possible outcomes of health effects, including for those who wish to convert this outcome (which can be positive or negative) or pathway or conduct the analysis with other set of principles. Thirdly,

when HIA is carefully applied, the probable health effects needed to project the image of the public by policymakers in decision-making becomes more practicable. For instance, HIA can be employed to demystify the benefits on health to the next generation by recommending people to do more of walking or cut down on the number of vehicle related injuries by the use of helmets [1,2,17,20,22].

Correspondingly, the system of HIA has the potential to display a more robust and reactive feedback, and not just serving as a tool to inform certain decisions alone. Chiefly, HIA can provide key information to the public, as well as other key participants about making informed decisions, including those whom interactions with the society concerning issues of health and behavioural problems [1,2,17,20,22,61,63,65] need to be made to improve [66,67]. Also, HIA can serve as the building block for strengthening the synergy for the promotion of health between participants and stakeholders in all sectors [2,17,20,22,61,63]. As a result, the idea of making an effort to create a “delightful diverse, safe, healthy and just world, with clean air, water, soil and power: economically, equitably, ecologically and elegantly enjoyed” is simply more inspiring than the old mantra of reducing negative impacts. HIA practitioners could adopt a positive framing of the need for sustainable development, while still being honest about the many unsustainable trends facing the global village, the enormity of the challenge and the insufficiency of incremental improvements? HIA practitioners can learn from the absolute perspective of EIA in the various process stage. It is important to note that “better” is not necessarily “good enough” and to put the environmental health impacts into a wider sustainability framing [2,17,20,22].

Embedding health impact assessment (HIA) in the existing environmental impact assessment (EIA)?

A vigorous tool that covers all aspect of HIA is needed to assist decision-makers in the identification of the most suited recommendations that aligns with sustainable development, if the UN SDGs is to be attained. The decisions must have a system perspective and all relevant impacts caused by the solution. HIA is equipped with this feature and its target is to proffer a detailed and well updated background to the impact solution and its foundational procedural sensitivity towards possible areas of its application. In the Nigerian context, environmental impact assessment (EIA) is a tool that will be very profitable if used to improve health impact assessment, this is predicated on the fact that the center of interest of the HIA will be on the improvement of health without focusing on the current resulting attempt on EIA [2,53,68]. It is of great significance that this inference is drawn considering the level of commitment to the implementation of EIA in Nigeria. Environmental Social and Health Impact Assessment (ESHIA) is currently a must for development projects that have the potential to impact the environment negatively and it is governed by the National Environmental Protection Act (NEPA) of 1969 and the 1992 Environmental Decree No. 86. Besides, this also complies with the Act CAP E12, and Laws of the Federation of Nigeria (LFN) [69]. Applying well define methods, the ESHIA act demands that government agencies are tasked with the responsibility of evaluating the effects of their actions. This is because, the ESHIA act demands that the study be implemented by the Federal Ministry of Environment (FMEnv). Furthermore, NEPA Act and the 1992 Environmental Decree No. 86, demands that an environmental impact statement be prepared, the outcome of the assessment summarized as a public document to assist policymakers in making decisions available for public scrutiny.

Different agencies at the federal and states level may take up the responsibility of managing any EIA, however, it has to be depended on the agency that has direct responsibility to evaluate the project being carried out. The weak state of the recent EIA practice in Nigeria is no longer hidden, as many professionals from different sectors have made their revelations. The cost of completing an EIA ranges from hundreds of thousands to millions of dollars and it usually take several years [2,17,70,71]. The final report of an EIA is often lengthy, usually up to thousands of pages. Guidelines stipulates that an EIA should not exceed 150 pages, however, the EPA estimates that only 37% of environmental impact assessment obey this rule [72]. Correspondingly, EIA proposals as authorized by the National Environmental Protection Act (NEPA) and Environmental Decree No. 86 of 1992, is expected to pay complete attention to human health effects, in spite of the clearly expressed reason of safeguarding “human society” and lessen the possible health effects and well-being on people [73].

In Nigeria, government regulations, such as the Environmental Impact Assessment Act of 1992, determines the impacts that will be focused on. This brings into question the exact environmental impact assessment and the judicial system, federal and state government

involvement in accordance with Act CAP E12, Laws of the Federation of Nigeria (LFN) [69], the investigation, analysis on the FMEnv is authorized by the ESHIA Act. In the Nigerian context, Lagos is leading the way in EIA, however, rather than prioritizing the impacts on human health, attention is only given to cancer linked environmental pollutants in the air, water and land media [1,2,6,11,12,22,33-35,37,44,53,74,75].

EIA is a well-defined statutory framework in which attention must be paid to, as it defines the basis for the proposal of a project, thereby avoiding litigation issues. However, it is not open to aspects where effects are unavailable for statutory scrutiny, for instance, human health. Also, another noteworthy aspect in the consideration of the integration of HIA as a subset of EIA processes, is that in EIA other activities that takes place outside the project is usually ignored [2,17,20,22,53,71]. The resultant effect of this is that, other aspects that can have positive human health effects, such as support for education, agriculture and minimum wage are usually lacking and therefore the HIA is not integrated in the EIA that is required to be carried out. Apart from the issues mentioned, which deals with legislation and regulation framework supporting the current EIA implementation which mostly can be politically addressed, there may however be other basic challenges. An intelligent and more detailed approach in Nigeria that will yield significant results, will therefore be merging various types of EIA, this is because, majority of the decisions made on health, including a lot of policies and other sectors being affected by these decisions, has to be flexible, robust and readily accessible. Conflict may arise, if HIA is integrated into an EIA that is not robust which presents issues on how to legally defend the concept [2,17,20,22,71]. With millions of Naira being spent on EIA annually since its inception decades ago in Nigeria, relating HIA and EIA may only comply with the statutory restrictions for EIA, rather than creation of an extension for the EIA. There is clearly no complete validation for the two. However, researchers have maintained that, for HIA to be enhanced through practitioners training, it has to be integrated with EIA [2,17,22,43,71].

Similarly, the relative rarity of HIAs addressing capabilities and related issues of empowerment and community development is not surprising. Bureaucratic, legal, or resource constraints make it difficult to engage in long-term, strategic approaches that involve the development of community capabilities. The relative scarcity may also be a signal, however, HIAs are not adequately focused on addressing the larger issues that can most effectively advance health. Adherence to prescribed procedures for HIA should not be confused with more substantive change. Robust, meaningful participation of members of affected communities in the HIA process may be instrumentally valuable for improving the quality of the process and the product, but it does not necessarily advance community capacities [2,17,20,22,71,76]. Efforts to advance health, even with vigorous community participation, will bear little fruit without the development of community capabilities and empowerment that enable greater autonomy and agency [77]. These goals place significant expectations on HIA could become an under resourced, jury-rigged tool that is usually without a legal mandate. As den Broeder and her coauthors [78] state, "it seems improbable that one stand-alone HIA could empower a community when no other actions are taken. It is also striking that, where community participation is concerned, procedures do appear to be pragmatic rather than systematic, while HIA itself is claimed to be systematic and evidence-based" (p. 41). Furthermore, it should be expected that integrating HIA into the existing EIA may meet some resistance, especially in the aspect of cost. Incorporating HIA into EIA will be generally interpreted as more. However, with the increasing popularity of HIA, this expected resistance can be overcome with timely and strategic public awareness. All stakeholders must be fully aware of the long-term benefits. The HIA must not be seen as taking up additional impact assessment, but as tool that completes the process of building a sustainable and worthwhile future.

Conclusion and Recommendation

The adoption of the UN Sustainable Development Goals (SDGs) in 2015 was an unprecedented milestone for the global community. This was necessitated due to the failures experienced in the implementation of the Millennium Development Goals (MDG), especially in the global south, lacking the needed economic motivation and/or leaders with requisite support and knowledge of the importance of UN's agenda or simply devoid of the needed will-power to pursue it. In the Nigerian context, considerable efforts were made in achieving

MDGs 7 and 8, however, it was not void of challenges stemming from cultural, socio-economic and corruption related issues. With a little over a decade left, Nigeria and other developing/low-income nations must systematically address the gaps responsible for the pitfalls in addressing the issues faced in the effective implementation of the MDGs, if they will make any substantial milestones in accomplishing the new goals of the SDGs. The 2030 Agenda for Sustainable Development is a one-of-a-kind roadmap tackling wide-ranging issues from eradicating poverty to fostering partnerships for the goals. With nearly all SDGs relying in one way or another on environmental resources, nexus thinking thus does not only equip us to recognise the interlinkages between the SDGs, but also supports the development of strategies that are more effective and socially acceptable. Given the significant importance of SDGs in Nigeria, there is need for planning and policy changes to support the HIA. Thus far, effort has been made in this paper to establish the fact that it is better to mitigate than supplying palliatives. Decision-making is effective when it is adequately informed. There is need for total commitment on the part of Government and citizens to the recommendations made by Adedoyin., *et al.* [2], Olalekan., *et al.* [17], Ajayi., *et al.* [1], Olalekan., *et al.* [22], Omidiji and Raimi [71], Raimi., *et al.* [8], Olalekan., *et al.* [7], Suleiman., *et al.* [31] and Raimi., *et al.* [20] which is necessary to achieve a sustainable environmental development. It is also noteworthy that no matter the robustness of the SDGs, there must be some sought of tangible responsibility and commitment on the part of governments to ensure strategic HIA policies implementation so as to achieve the requirements of the goals, or there is likely to be a repeat of the pitfalls experienced with the millennium development goals (MDGs). It is concluded that HIA is quite powerful and capable of providing an effective technical tool necessary to help in health policy improvement and healthcare. This study makes an important contribution to literature on how HIA in the context of a developing country can improve understanding of contemporary environmental health challenges. In addition, this study aims to make transparent the positions of various actors on the issue of HIAs in Nigeria and as a manual on how to perform an HIA by policy and decision makers in government and industry. Additionally, at the global level, financing institutions, including members of the International Finance Corporation (IFC) and development partners can play a vital role in closing the identified gaps. This can be done by setting up and enforcing more stringent requirements through a comprehensive HIA reports along with reinforcing the instructions for integrating health into different EIAs to achieve quality compliance. Finally, any attempt to improve the rigorous inclusion of health in EIA should be linked with HIA capacity building, which appears particularly salient in the currently environment-dominated impact assessment practice in Nigeria. The Improvement of international HIA standards laid the foundation for the development of international relations; health outcomes for local communities should be prioritized in order to create long-term, sustainable economic investment opportunities.

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