

ASSESSMENT OF THE CAPACITY OF NIGERIAN VALUERS TO VALUE BIODIVERSITY

Israel Okechukwu Ogbonna, PhD; okeyogbonna2@yahoo.com

Godfrey Okon Udo, PhD; godfreyudo@uniuyo.edu.ng

University of Uyo, Nigeria

ABSTRACT

Nigeria with rich biodiversity has, under the National Biodiversity Strategy and Action Plan (NBSAP), 2016-2020, committed to conduct economic valuation of her biodiversity between 2016 and 2020. It becomes necessary therefore, to enquire whether the nation has the required indigenous professionals for biodiversity valuation. One way of carrying out this enquiry is by assessing the capacity of Nigeria's professionals who by training and license, are in position to carry out valuation of the environment. This work has carried out this assessment with the objective of examining the extent to which international best practices of Environmental (Biodiversity) Valuation are adopted in Nigerian Valuation practice. It answers the question as to whether Valuers in Nigeria are competent in biodiversity valuation. The survey method was adopted and questionnaires were administered on Nigerian practising Valuers as well as owners of environmental goods whose land rights were compulsorily acquired by government. The study also included content analysis and document review. The findings are that Nigerian Valuers are slow in adopting international best practices of biodiversity valuation - a show of low capacity for the work. This paper advocates that Nigerian Valuers be further equipped for biodiversity valuation through Continuing Professional Development (CPD) Programmes as well as curriculum review for inclusion of biodiversity valuation in their training.

Key Words: Assessment, Capacity, Valuers, Biodiversity

INTRODUCTION

Nigeria is at the top of the list in global ranking of nations endowed with rich biodiversity (Nigeria Biodiversity and Tropical Forestry Assessment Team, 2008) and Target 2 of her National Biodiversity Strategy and Action Plan (NBSAP), 2016-2020 is to conduct economic valuation of biodiversity between 2016 and 2020. It becomes necessary therefore, to enquire whether the nation has the required professionals to value biodiversity. One way of carrying out this enquiry is to assess the

capacity of Nigeria's professionals who are in position (and are recognized) to carry out environmental asset valuation. The Objective of this work is therefore, to examine the extent to which international best practices of Environmental (Biodiversity) Valuation are adopted in Nigerian Valuation practice. It answers the research question: to what level are Nigerian valuers competent in biodiversity valuation.

2.0 LITERATURE REVIEW

According to Federal Republic of Nigeria, Fourth National Biodiversity Report (2010) "...natural resources valuation has not been fully incorporated into the national economic planning", contrary to the goal of the National Biodiversity Strategy and Action Plan (NBSAP) of "integrating biodiversity consideration into national planning, policy and decision-making processes". It is in this regard that the Nigerian National Biodiversity Strategy and Action Plan (NBSAP), 2015 provided for Target 2, namely, "By 2020, a comprehensive programme for the valuation of biodiversity is developed and implemented through Conduct of Economic Valuation of Biodiversity and national studies on 'The Economics of Ecosystems and Biodiversity' (TEEB) by The Nigerian Conservation Fund (NCF)"; as well as Target 14: "By 2020, the capacity of key actors is built" (Federal Republic of Nigeria, National Biodiversity Strategy and Action Plan (NBSAP), 2015).

The question however, is: how competent are the biodiversity valuation professionals in Nigeria? The Estate Surveyors and Valuers are the professionals recognized as valuers in Nigeria (Estate Surveyors and Valuers Registration, etc Act). Ogunba (2013), who also recognized them as being in good position to value nature in Nigeria based on their training, however doubts their capacity to handle the job. This is because the said professionals do not adopt international best practices in valuing environmental assets. (Environmental Law Institute, 2003; Ogunba, 2009; Otegbulu and Koleoso, 2009; Udo and Egbenta, 2011; Otegbulu, 2013). The said non-adoption of international best practices is in terms of three areas identified in this work, namely, basis, methods and purposes.

On *Basis*, the internationally-recognized basis of valuing biodiversity is total economic value, whereas in Nigeria the prevalent basis of valuation is still market value (Otegbulu and Koleoso, 2009). As for *Methods*, international best practice is to combine the market value methods of direct comparison, capitalization of

income and depreciated replacement cost with non-market valuation methods of contingent, choice modelling, travel cost, benefit transfer, and so forth. In Nigeria however, this is not yet the practice as there is preponderant use of only the market value methods of direct comparison, capitalization of income and depreciated replacement cost (Environmental Law Institute, 2003; Udo and Egbenta, 2011; Otegbulu, 2013).

On *Purposes*, contrary to what obtains internationally, environmental valuation is yet to be generally deployed for many of its purposes in Nigeria. Some purposes for which it is yet to be generally deployed include valuation for greening of national accounts; valuation for ecosystem/biodiversity conservation; valuation for environmental (air, land and water) pollution; non-timber forest products valuation; marine, river and aquatic products' valuation; valuation of wetlands; valuation for flooding damages/control; valuation for soil erosion damages/control; valuation for ocean water damages/control; valuation for desertification damages/control; valuation for mining disaster damages/control as well as valuation of sacred properties/heritage assets (Ogunba, 2009, 2013; Otegbulu, 2010).

If this low-level environmental valuation practice continues in Nigeria and yet there is need to carry out environmental valuation assignments in the country, including economic valuation of biodiversity between 2016 and 2020, any of these scenarios may emerge (or could well be taking place presently):

- i. Foreign environmental valuation professionals will come into Nigeria to handle such assignments (Alonge, 2017), thereby denying Nigeria the benefits of a developed national human capacity (Tettey, 2006).
- ii. Where there is insistence on use of environmental valuation professionals practicing in Nigeria as they are presently, in compliance with the law, low quality jobs will naturally be produced. This poses risk to the

users in particular as well as national and world economy, in general (Alonge, 2017).

iii. As boundaries between professions are narrowing, other professionals and indeed professional quacks can seize the opportunity to monopolize and dominate that aspect of the work of environmental valuation professionals (Oloyede, Ayedun and Ajibola, 2011).

iv. There is likelihood that the numerous benefits that accrue from biodiversity valuation cannot be reaped in Nigeria if this scenario occurs: at the same time foreign environmental valuation professionals are dissuaded from coming into Nigeria; Nigerian environmental valuation professionals, owing to incapacity to handle the assignments, neglect environmental valuation; and other professionals and quacks, owing to regulations, do not venture into environmental valuation in Nigeria.

3.0 RESEARCH METHOD

3.1 Units of Data

The Units of Data for this work are:

- (i) Adoption of international standard Basis of valuation in Nigerian environmental valuation practice.
- (ii) Adoption of international standard methods of valuation in Nigerian environmental valuation practice.
- (iii) The number of internationally-recognized purposes of biodiversity valuation for which Nigerian Valuers carry out assignments.

3.2 Research Population and Sampling Design

Three clusters of population were identified and used:

- a. Owners of farmlands and forests whose goods have at one time or the other been valued
- b. Owners of assets in oil spill damage assessment
- c. Practising Valuers in Nigeria

Regarding Owners of farmlands/forests in ordinary Government revocation of occupancy as well as Owners of environmental goods in oil spill damage, this work limited the survey to one of the Niger Delta States, out of ten. Rivers State was selected for the research as the Ogoni

UNEP Report has made the State the most notorious for environmental degradation among the Niger Delta States of Nigeria. For owners of farmlands/forests, respondents (Population) obtained by reference to practising Valuers, were 1,293 claimants. A sample of 306 (23.67% of population) was chosen. Regarding Owners of environmental assets in oil spill damage assessments, the population consists of claimants for damages that resulted from May 1, 2010 rupture of Exxon Mobil pipeline which spilled more than a million gallons into the Niger Delta region States. Respondents (Population) got for this cluster, also by reference to practising valuers, were 1,448 claimants. A sample of 314 (21.69% of population) was chosen.

For Practising Valuers, a sample of 272 (32.15% of population) was chosen out of the 846-total number of Valuation firms operating their Head Offices in parts of the country indicated in the 2017 Directory of the Nigerian Institution of Estate Surveyors and Valuers (NIESV). To ensure that firms from all parts of Nigeria are given equal chance of participating in the Survey, the sample 272 firms were distributed among the six geo-political zones of the country based on the proportion of each zone's number of firms in relation to the total population of firms throughout the country. The South South with 135 firms (15.96% of the firms in the nation) was allocated 44 while South East with 75 firms (8.87% of the firms in the nation) was allocated 24. The South West with 405 firms (47.99% of the firms in the nation) was allocated 131 while North Central with 169 firms (19.98% of the firms in the nation) was allocated 54. The North East has 7 firms (0.8% of the firms in the nation) and was therefore allocated 2 while the North-West which has 54 (6.40% of the firms in the nation) got 17.

The respondents responded at different rates. Out of the 306 Owners of Environmental goods (Farmlands/Forests) sampled, 215 (70.26% of the Sample) responded while out of the 314 Owners of Environmental goods (Assets in Oil

Spill Damages) sampled, 196 (62.42% of the Sample) responded. For Practising Valuers, out of the 272 sample, 177 (65.07% of the Sample) responded. We consider these response rates good enough, considering the high level of difficulty in tracking down such busy respondents for questionnaire administration.

3.3 Research Variables

The research variables of this work are (1) Adoption of TEV as Basis of Valuation and (2) Adoption of non-market valuation methods of valuation. The data are derived from analysis of Questionnaire on Nigerian Practising Valuers; analysis of Questionnaire on Owners of Environmental goods; Content Analysis of some Valuation Reports; and a Review of the Provisions of the Land Use Act on Compensation Valuation.

3.4 Techniques of Data Analysis

Field data were analysed with simple descriptive statistics and t-test. Content analysis of some Valuation Reports and document review were used to validate the research hypothesis.

4.0 RESULTS AND DISCUSSION

4.1 Survey Results

All the 196 Valuers for oil spill compensation used Market Value as the Basis of Valuation while none adopted the internationally-recommended Total Economic Value. On the method of valuation adopted, 80 (40.8%) used Direct comparison which is a market-based method; 196 (100%) used Depreciated replacement cost market-based method; 196 (100%) used market-based Investment method. No respondent adopted any of the non-market-based methods, namely, Contingent, Choice modelling, Travel cost and Benefit transfer. A Content analysis of some Oil Spill Valuation Reports for nine communities in Rivers State of Nigeria also showed that Market Value was the basis of valuation and the methods of valuation adopted were Market-based.

For Farmlands/Forests valued for general compensation purpose, there was no need asking the owners about the Basis and Method

of Valuation adopted as most of them may not have the information, given that they are not usually given copies of the Valuation Reports by the government-appointed Valuers. However, as the valuations are statutory valuations, which are usually carried out based on the stipulations of the Land Use Act, the researchers only had to analyse the said stipulations to come up with the Basis and Methods adopted.

The stipulations are in Ss.29 and 50 of the Act which recognizes crops and improvements in terms of plantations of long-lived crops or trees as the only environmental assets that can be valued for and compensated for in revocations of rights of occupancy. By the provisions of the Act, only a part of biodiversity on the land are taken into cognizance when government revokes right of occupancy. This means that Total Economic Value Basis of Valuation is not adopted in the valuation for general compensation purpose in Nigeria.

The Act stipulates in S.29 (3) that the Method of Valuation and value for the recognized items are as prescribed and determined by the "Appropriate Officer" (the Chief Lands Officer of the State in question and for the Federal Capital Territory, the Federal Chief Lands Officer). One should think that in order to satisfy the Claimants, the various Appropriate Officers will be adopting international standard basis (Total Economic Value) and non-market methods of valuation such as Contingent, Choice Modelling, Travel Cost and Benefit Transfer which usually throw up values that are in tandem with the actual value of losses sustained by claimants. Consequently, the researchers felt that a way to know whether the said international standard basis and methods of valuation are being adopted in compensation valuation of goods in ordinary government revocation of occupancy on land in Nigeria was to test how satisfied the Claimants were with the compensation values computed and paid to them. To this end, question was posed to the claimants to

determine their satisfaction level with the outcomes of the valuation of their assets. To this, all the 215 respondents claimed that their properties were highly under-valued. To ensure that the claimants were not making spurious claims or showing greed, the authors engaged an independent valuer who gave spot valuation of samples of the subject environmental assets (using the classic market value basis) and the outcome was equally that the assets were highly under-valued. One can therefore infer that the

original valuations are not normally based on the international standard methods of valuation. Another major finding is that a very low proportion of the Valuers (0-5.6%) have “Always” carried out majority of the internationally-recognized purposes of Environmental Valuation, including biodiversity valuations. Furthermore, a one-sample t-test has been used to test the hypothesis that Nigerian Valuers are not competent in international best practices on biodiversity valuation and the result is shown in Table 1.

Table 1: One-Sample T-Test

	t	df	Sig. (2-tailed)	Test Value = 5		
				Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
L1	1.077	14	0.300	11.73333	-11.6405	35.1072
L2	0.533	14	0.602	2.06667	-6.2518	10.3852
L3	1.025	14	0.323	4.13333	-4.5141	12.7808
L4	1.691	14	0.113	5.06667	-1.3591	11.4924
L5	8.142	14	0.000	129.00000	95.0183	162.9817

Source: Researcher’s Statistical Analysis (2018).

For this analysis, the following were used: L1- Always adopted; L2 - Very often adopted; L3 - Sometimes adopted; L4 - Rarely adopted; L5 - Never adopted

The results reveal that the t-statistic was (L1 = t 1.077; p = 0.300); (L2 = t.533; p = 0.602); (L3 = t1.025; p = 0.323); (L4 = 1.691; p = 0.113) and (L5 = t8.142; p= 0.000). The values indicate that four of the t-statistics (L1 – L4) were insignificant. Only L5 was significant at t =8.142; p=0.000 at 95% confidence interval. Based on these results, we confirmed that there was low level adoption of international best practices in Nigerian biodiversity Valuation practice and invariably, there is low capacity for Biodiversity Valuation in Nigeria.

4.2 Discussion of Results

That a very high proportion of Nigerian Valuers has never carried out valuation adopting the internationally-recognized Total Economic Value (TEV) as basis of valuation is a confirmation of Otegbulu and Koleoso (2009) and Otegbulu (2013) who advocated adoption of Total Economic Value as a panacea to

environmental resource valuation and related conflicts in Nigeria. As regards methods of valuation, the finding that, as against the internationally-recognized contemporary non-market methods of Valuation, the conventional methods are still the preponderant methods of valuation being adopted in Nigeria is in line with the findings of Environmental Law Institute (2003), Udo and Egbenta (2011), Ajibola (2012), Ajibola, Ogungbemi and Adenipekun (2012), Mayowa (2012), Ajibola and Awodiran (2013), Babawale (2013) and Ogunba (2013). For purposes of valuation, the finding that in Nigeria, Environmental Valuation is not yet being deployed to some of its internationally-recognized purposes aligns with the positions of Otegbulu (2010) and Ogbonna, *et al.* (2015).

These indications of low adoption of international best practices in Nigerian environmental valuation practice as well as its low use for the larger number of internationally-recognized purposes of

valuation are a show of the low competence of valuers in Nigeria for Biodiversity (Environmental) Valuation - confirmed by a t-test. This satisfies the Objective which is to determine the extent to which Nigerian Valuers are competent in international best practices on biodiversity valuation. These indications of low adoption of international best practices in Nigerian environmental valuation practice have satisfied the Objective which is to determine the extent to which Nigerian Valuers are competent in international best practices of biodiversity valuation.

5.0 CONCLUSION AND RECOMMENDATIONS

Adoption of Total Economic Value as Basis of Valuation for Biodiversity Valuation practice in Nigeria was found to be low; there is low use of the internationally-recognized contemporary methods of Environmental (Biodiversity) Valuation as well as low deployment of the discipline for internationally-recognized Purposes. The persistence of this situation is with great consequences to the country and the Nigerian environmental valuation professionals. We therefore recommend re-training of practising Nigerian Valuers on Environmental (biodiversity) valuation. More so, the various State Chief Lands Officers in the country, who normally should be valuers, specifically need this re-training as they are statutorily charged with the responsibility of recommending rates used in compensation valuation for environmental assets compulsorily acquired in Nigeria. The easiest route for this re-training would be Continuing Professional Development (CPD) Programmes. We also recommend a curriculum review in the various tertiary institutions offering courses in the valuation of land resources, to include Environmental (Biodiversity) Valuation.

REFERENCES

Alonge, V. A. (2017). Standardization of valuation report in Nigeria: Valuation reports standards in accordance with

ESVARBON regulations. Paper delivered at the Mandatory Continuous Professional Development Programme (MCPD) of The Nigerian Institution of Estate Surveyors & Valuers, Lagos State Branch on Wednesday 27th September 2017 at Classic Event Centre, KudiratAbiola Way, Oregun, Lagos State, Nigeria

Environmental Law Institute (2003). Natural resource valuation and damage assessment in Nigeria: A comparative analysis. <http://www.eli.org/sites/default/files/eli-pubs/d13-18.pdf>. (Retrieved on 18th April 2015)

Federal Republic of Nigeria (1975). Estate surveyors and valuers (registration, etc) act no. 4, Policy and Legal Advocacy Centre (PLAC), *The Complete Laws of Nigeria*. www.placng.org/lawsofnigeria/node/95 (Retrieved on 18th April 2017)

Federal Republic of Nigeria (2015). National biodiversity strategy and action plan, 2016-2020. <https://www.cbd.int/doc/world/ng/ng-nbsap-v2-en.pdf> (Retrieved on 18th April 2017)

Federal Republic of Nigeria (2010). Fourth national biodiversity report, 2010. <https://www.cbd.int/doc/world/ng/ng-nr-04-en.pdf>. (Retrieved on 18th April 2017)

Nigeria Biodiversity and Tropical Forestry Assessment Team (2008). Nigeria biodiversity and tropical forestry assessment: Maximizing agricultural revenue in key enterprises for targeted sites (markets). http://pdf.usaid.gov/pdf_docs/Pnadm536.pdf. (Retrieved on 1st September 2015)

Ogbonna, I. O., Muhammed, B. and Udo, G. O. (2015). Public-private partnership model in the regeneration of Nigerian cities: The role of valuers in consolidating them.

- Paper presented at the 2015 Annual Conference of The Nigerian Institution of Estate Surveyors and Valuers held at Oshogbo, Osun State, 10th -14th March.
- Ogunba, O. A. (2009). Valuation issues in the establishment of a Nigerian system of Integrated SNA 93 compliant monetary values for natural and non-natural assets. In Nubi, T. G., Omirin, M.M, Adisa, S. Y., Koleoso, H. A. and Osagie, J. U. (eds.), *Readings in Environmental Economics and Conflict Resolution*. Department of Estate Management, University of Lagos, Lagos, 161 - 178pp
- Ogunba, O. A. (2013). *Principles & Practice of Property Valuation in Nigeria*. Atlantis Books, Ibadan, 495p
- Oloyede, S.A., Ayedun, C.A. and Ajibola, M. O., (2011). Issues facing the estate surveying and valuation profession in Nigeria, *Resources Management Dynamics*, 1(2): 54 - 60.
- Otegbulu, A. C. (2010). *Assessment of User-Demand Preferences of Urban Infrastructure in Lagos Metropolis Using the Contingent Valuation Model*. PhD Thesis, Enugu State University, Enugu
- Otegbulu, A. (ed.) (2013). *Natural Resource Valuation and Damage Assessment in Nigeria: A Case Study of the Niger Delta*. University Press, Ibadan, 111p
- Otegbulu, A.C and Koleoso, H.A (2009). Total economic value concept: A panacea to environmental resource valuation and related conflicts in Nigeria. In Nubi, T. G., Omirin, M. M, Adisa, S. Y., Koleoso, H. A. and Osagie, J. U. (eds.), *Readings in Environmental Economics and Conflict Resolution*. Department of Estate Management, University of Lagos, Lagos, 364 - 380pp
- Tettey, W. J. (2006). Staff retention in African universities: Elements of a sustainable strategy.https://siteresources.worldbank.org/INTAFRREGTOPTEIA/Resources/Academic_Staff_Retention_Final_2_06.pdf. (Retrieved on 12th June 2016)
- Udo, G.O and Egbenta, I. R. (2011). Using contingent valuation to value non-use goods for compensation in Nigeria. [http://www.academia.edu/710735/USING_CONTINGENT_VALUATION_TO VALUE NONUSE GOODS FOR COMPENSATION IN NIGERIA](http://www.academia.edu/710735/USING_CONTINGENT_VALUATION_TO_VALUE_NONUSE_GOODS_FOR_COMPENSATION_IN_NIGERIA). (Retrieved on 18th February 2014)