

A G D I Working Paper

WP/19/082

Youth empowerment in non-timber forest products (NTFPs) of sub-Saharan Africa: The role of corporate social responsibility in Niger Delta, Nigeria ¹

Forthcoming: Journal of Enterprising Communities: People and Places in the Global Economy

Joseph I. Uduji

(Corresponding Author)

Department of Marketing, Faculty of Business Administration

Enugu Campus, University of Nigeria, Nsukka, Nigeria

E-mails: joseph.uduji@unn.edu.ng; joseph.uduji@gmail.com;
joseph.uduji@yahoo.com

Elda N. Okolo-Obasi

Institute for Development Studies, Enugu Campus,

University of Nigeria, Nsukka, Nigeria

E-mails: eldanduka@yahoo.com; ndukaelda@yahoo.com

¹ This working paper also appears in the Development Bank of Nigeria Working Paper Series.

Research Department

Youth empowerment in non-timber forest products (NTFPs) of sub-Saharan Africa: The role of corporate social responsibility in Niger Delta, Nigeria**Joseph I. Uduji & Elda N. Okolo-Obasi**

January 2019

Abstract

Purpose – The purpose of this paper is to critically examine the multinational oil companies' (MOCs) corporate social responsibility (CSR) initiatives in Nigeria. Its special focus is to investigate the impact of General Memorandum of Understanding (GMOUs) on rural young people involved in non-timber forest products (NTFPs) for sustainable livelihood in Niger Delta, Nigeria.

Designed/methodology/approach – Data for this study were collected from primary sources, using participatory rural appraisal (PRA) technique of semi-structured interview (SSI) questionnaire. The use of a participatory research technique in collecting CSR impact data especially as it concerns the rural young people is because it involves the people being studied, and their views on all the issues are paramount. Both descriptive and inferential statistics were used to analyze the data. Inferential statistical tool-estimation of logit model was used to test the two research hypotheses.

Findings – The results indicate that general memorandum of understandings (GMOUs) have not given adequate attention to the young people as a special target sub-group who live in rural areas and depend mostly on NTFPs. Results also show that a number of factors hindering rural young people from the use and development of NTFPs include a policy vacuum, non-destructive harvesting, and destruction of natural habitats, bushfires, population growths and high demands.

Research limitations/implications – The semi structure interview questionnaire was directly administered by the researchers with the help of research assistants. The use of local research assistants was because of the inability of the researchers to speak the different local languages and dialects of the many ethnic groups of Ijaws, Ogonis, Ikweres, Etches, Ekpeyes, Ogbas, Engennes, Obolos, Isokos, Nembes, Okirikas, Kalabaris, Urhobos, Iteskiris, Igbos, Ika-Igbos, Ndonis, Orons, Ibenos, Yorubas, Ibibios, Anangs, Efiks, Bekwarras, Binis, Eshans, Etsakos, Owans, Itigidis, Epies, Akokoedos, Yakkurs, etc, in the sampled rural communities.

Practical implications –An appropriate GMoU-intervention framework for a sustainable promotion of NTFPs, domestication of NTFPs, improving harvesting and processing techniques are necessary to facilitate good security, reduction of poverty and improved livelihoods, particularly for the economically-marginalized and forest-dependent rural young people is imperative.

Social implications – Sustainable livelihoods of the forest-dependent rural young people in sub-Saharan Africa would require some focused CSR interventions on the NTFPs for sustainable livelihood. Facilities pertaining to storage, grading, processing and value addition through convergence of existing schemes and programmes should be promoted and created. MOCs are in a position to empower the rural young people with information about the market, policy and products to enable the rural people strategize and access returns from NTFPs in sub-Saharan Africa.

Originality/value – This research adds to the literature on multinational enterprises (MNEs) CSR initiatives in developing countries and rationale for demands for social projects by host communities. It concludes that business has an obligation to help in solving problems of sustainable livelihood.

Keywords—Economic Empowerment, Corporate social responsibility, Multinational oil companies, Rural young people, Non-timber forest products, sub-Saharan Africa.

Introduction

A livelihood is sustainable when it can cope with and recover from the stresses and shocks, and maintain or enhance its capabilities and assets both now and in the future without undermining the natural resource base (Chambers and Conway, 1992). During the 1990s until the present, there has been a shift from a material perspective focused on food production to a social perspective that focuses on the enhancement of people's capacities to secure their own livelihoods; much of this thinking is derived from the participatory approaches that have become well integrated into the various implementing agencies' activities for project diagnosis and design (Frankenberger, 2000). Approximately, one third of the World's poor live in Africa; more recently, evidence shows that inequality may indeed be a more significant challenge in Africa than in other region of the developing world (UNDP, 2016). High levels of poverty and inequality persist in Africa despite its being one of the fastest growing regions in the last decade; in particular, six of the World's ten fastest growing economies during 2001-2010 were in sub-Saharan Africa (IMF, 2013). Specifically, the fastest growing economies in Africa in this decade (2001-2010) were Angola, followed by Nigeria, Ethiopia, Chad, Mozambique, Rwanda and Equatorial Guinea (IMF, 2017). Despite its vast oil riches and impressive economic growth, Nigeria has struggled to lift its people out of poverty over the past three decades (UNDP, 2013).

The petroleum industry is the backbone of the Nigerian economy, accounting for over 90 percent of the total foreign exchange revenue (World Bank, 2014). Estimates of the total crude oil reserves vary, but generally accepted to about 35 billion barrel (African Development Report, 2015). The product is exported through seven terminals, and a number of floating production vessels. There are about 606 onshore oil fields, most with less than 100 million barrels per day of extractable reserves (FGN, 2017). The Nigerian National Petroleum Corporation (NNPC), which is the state-owned oil firm, has a 55 percent interest in Shell, plus 60 percent stake in each of Chevron-Texaco, Exxon mobile, Agip and TotalFinaELF. However, the Niger Delta communities where the multinational oil companies (MOCs) maintain a significant presence have frequently complained that MOCs

don't hire permanent staff, or in some cases sufficient personnel, or even employ casual labour from the host communities for construction work or other projects. But MOCs have voiced concerned that given the restiveness in the region and the prevalence of rent-seeking activities, employing rural young people from the locality may expose them to security problems, which might hinder their production activities (UNDP, 2006). Meanwhile, local people have traditionally depended heavily on the non-timber resources of the forests to make a living. They extract a wide variety of forest products for domestic use and for sale in traditional markets. These include fuel wood, fibres, leaves, dyes fruits and nuts, medicinal plants, barks and roots, spices, palm wine, snails, mushroom, honey, wild game, etc (NDDC, 2004). The much-reduced forest cover, due to decades of oil spillage and gas flaring has increased pressure on the remaining forests, which are now suffering from overuse that is further exacerbated by high demand from the expanding towns and cities. Also, it has been well established that wealthier people in urban areas utilize far more forest resource derivatives than the rural poor who directly depend on them in the region. Rural young people unfortunately are not also benefiting from the increased exploitation of non-timber forest resources. Middlemen package most of the harvest for urban markets, where they make huge gains. Very little returns to the rural economy; in general, there is a net transfer of resources from the rural to the urban areas (World Bank, 2008). Consequently, as an alternative source of livelihood, many rural young people appear to have resolved to rent-seeking from oil operations in the form of standby money or oil bunkering, hostage-taking and sabotage of oil pipelines.

In line with this rhetoric, MOCs have implemented many corporate social responsibility (CSR) policies since the late 1990s, particularly focusing on development projects in the region. According to UN (2006) report, the challenge for CSR in developing countries is framed by a vision that was distilled in 2000 into the Millennium Development Goals – “a world with less poverty, hunger and disease, greater survival prospects for mothers and their infants, better educated children, equal opportunities for women, and a healthier environment”. However, the extent to which the CSR initiatives of oil companies have contributed to community development in the region remain contested, as most scholars highlight the conspicuous failure of these projects (Idemudia, 2007; Edoho, 2008; Eweje, 2007; Amao, 2008; Omeje, 2006; Alfred, 2013; Ekhator, 2014). It has been consistently shown that communities in the Niger Delta still have a highly negative view of MOCs operations in terms of their employment and community development projects (Frynas, 2005). Violence within the region has only escalated in recent decades with attacks on oil infrastructure and industry personnel making the Niger Delta essentially volatile (Menchant, 2014). With many supporting the merits of CSR in the region (Ite, 2006; Uduji and Okolo-Obasi, 2017; Lompo and

Trani, 2013; Uduji and Okolo-Obasi, 2018a; Renouard and Lado, 2012; Uduji and Okolo-Obasi, 2019; Uduji *et al.*, 2018a), it is important to seek an explanation for these observations.

Thus, this paper contributes to the young people debate in sustainable livelihood by assessing the empirical evidence from the CSR perspective in three areas that have received much attention in the literature. The three areas of focus equally represent three main questions, notably:

- i. What is the level of CSR intervention of MOCs in the non-timber resources of the forests for sustainable livelihood in the Niger Delta, Nigeria?
- ii. Do GMoUs interventions of the MOCs impact on economic empowerment of rural young people in non-timber forest products for sustainable livelihood in Niger Delta, Nigeria?
- iii. What are the consequences of economic empowerment of rural young people in non-timber forest products for sustainable livelihood in sub-Saharan Africa?

The positioning of the research deviates from contemporary African CSR literature which has focused on, *inter alia*: on exploring influences of varieties of capitalism on expressions of corporate codes of conduct (Amaeshi and Amao, 2009); tool for conflict resolution in the arena of contested politics (Asgil, 2012); the need of rural farmers (Uduji and Okolo-Obasi, 2017); conflict and prospects for resolution (Boele *et al.*, 2001); development of rural young people in cultural tourism (Uduji *et al.*, 2018b); environmental sustainability (Edoho, 2008); activities of the Chinese oil and gas industry in the continent (Ekhatior, 2014); development of women in small scale fisheries (Uduji and Okolo-Obasi, 2018c); the sceptism of stakeholder in local communities (Eweje, 2007); the false development promises of oil companies (Frynas, 2005); rural women in livestock keeping in rural communities (Uduji and Okolo-Obasi, 2018d); community perceptions and expectations in oil host communities (Idemudia, 2007); changing times and strategies for sustainable community development (Ite, 2006); the role of rural women in sustainable agricultural development (Uduji *et al.*, 2019b); human development (Lompo and Trani, 2013); inequality on CSR implementation in local communities (Renouard and Lado, 2012) and adopting a CSR-based business model for extractive industries (Slack, 2012).

The further content of this paper is organized as follows. Section 2 presents the context of young people in Niger Delta region. Section 3 provides the issues of non-timber forest products for sustained livelihood in Niger Delta region. Section 4 reports the plethora of CSR activities in Niger Delta region, while section 5 explains the theoretical perspective. Section 5 describes the

methodology. Section 6 presents the results, while section 7 discusses the findings. Section 8 presents the concluding remarks, caveats and the future research directions.

Rural young people in Niger Delta region

The Niger Delta region is vast 70,000 km² oil basin in the southern part of Nigeria, and consists of nine administrative states as shown in figure 1. Watt (2004) points out that the Delta is characterized by remarkable ethno-linguistic diversity and that its communities were economically marginalized during the British rule where indirect governance through a warrant chief system was implemented. Since independence the communities have complained that they remain marginalized by a federation that is dominated by the ethnic majority of the Hausa, Igbo and Yoruba. However, the entry of oil extraction into the conflict added a new dynamic to the grievances of these communities. They have protested that oil revenues are not shared with local governments and thus they have continued to be excluded from economic gains, even when the oil is found in their communities (Boele *et al.*, 2001). Analysis of poverty and human development paint a dismal picture, particularly when the Niger Delta region is compared with other oil-producing regions of the world (PIND/UNDP, 2011). The region's poverty in the midst of vast oil wealth seems to have frustrated the young people expectations, fostered widespread indignation, entrenched deep-rooted and destructive mistrust, and incited the unprecedented restiveness in the region (PIND, 2011; Omeje, 2006).

The young people struggle began with a twelve day revolution led by Isacc Boro on February 23, 1996, when a group of young Ijaw men declared the Ijaw territory of the Niger Delta 'The Niger Delta People's Republic'. Their aim was to liberate the region and obtain access to the benefits from its petroleum resources. The group blew up pipelines, particularly those linking Oloibiri and Ugheli to Port Harcourt. But their emancipation struggle did not continue, because within 12 days of this escalation, Isacc Boro and his associates were arrested, tried and sentenced to death, but subsequently pardoned (UNDP, 2006). However, the most conspicuously hostile relationship developed between the MOCs and the Ogoni community led by the activist, Ken Saro-Wiwa. Their protests took on a global character when the Nigerian government executed Ken Saro-Wiwa and eight other men involved in leading protests by the Ogoni people against the MOCs operations in the region. It is against this backdrop of escalating and often violent domestic protests, increasing international criticism of the MOCs and the associated reputation risk, that the MOCs rapid adoption of CSR should be seen (Marchant, 2014). In 2009, the federal government of Nigeria offered an amnesty programme to end the violence and instability that have significantly decreased

oil production and exportation from the region. The main objective of the amnesty programme was to disarm, demobilize and reintegrate militant young people back into their communities (MNDA, 2015). The programme involved offering benefits – such as opportunities in education, as well as money – to militant young people who gave up their arms. The programme initially resulted in a sharp reduction of violent attack against the oil industry, and led to a temporary increase in oil production and exportation from the region. But due to a sharp fall in oil prices, the programme became increasingly difficult for the Nigerian government to fund. As a result, new militant young people groups have started emerging again in the region, claiming to represent the grievance of local communities. Some of these new groups include the Niger Delta Avenger (NDA), Red Scorpions, and the Niger Delta Greenland Justice Movement (NDGJM). Meanwhile, the attacks on the region's oil infrastructures have resurged, resulting in a reduction of the Nigerian's oil production from 2.2 million to about 1.1 million barrels per day (FGN, 2017). Thus, this paper seeks a traditional livelihood for rural young people in non-timber resources of the forest in Niger Delta region.

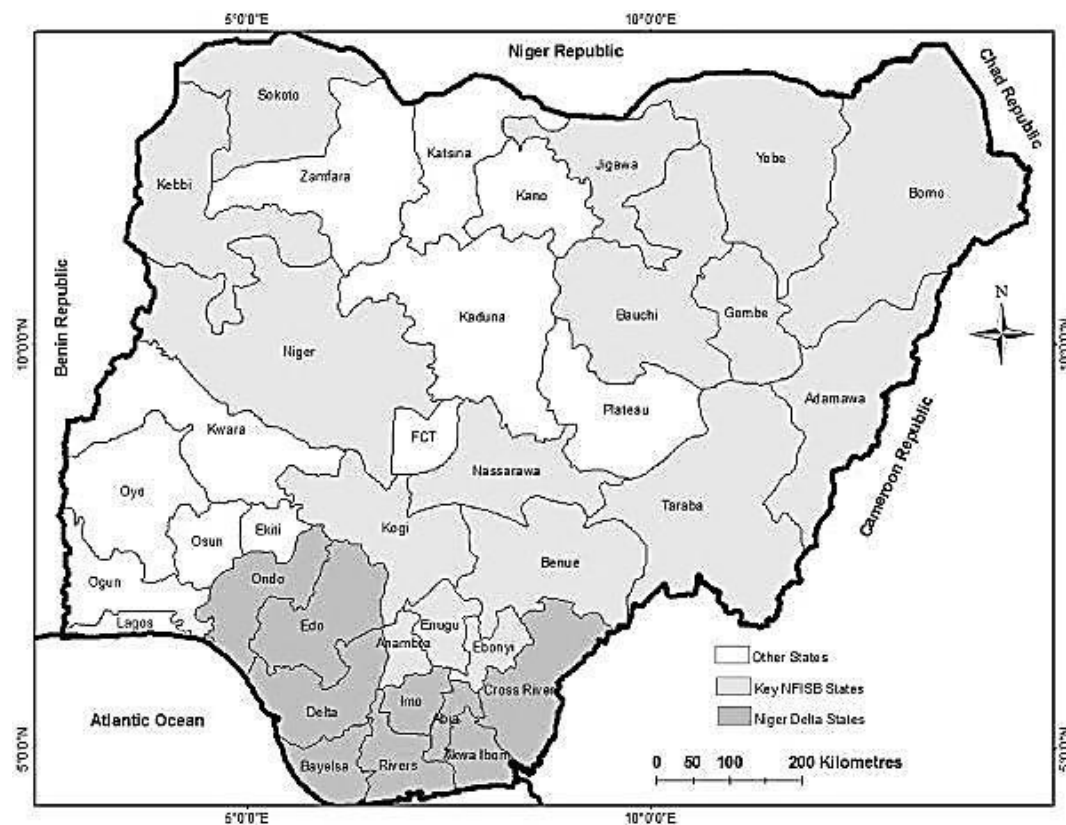


Figure 1. Constituent administrative states of the Niger Delta Region, Nigeria

Non-timber forest products' livelihood in Niger Delta

The broad terms ‘non-timber forest resources’ (NTFR) or ‘non-timber forest products’ (NTFPs) refer to natural resources (FAO, 2006). They are also referred to as non-wood forest products, botanical forest products, or special forest products, which include a wide range of plant and fungal species that have commercial, recreational, and traditional cultural values (Pandey *et al.*, 2016). They are used for food, medicine, land restoration and beautification, floral greenery, and crafting (Asfaw *et al.*, 2013). The NTFPs play important roles in the livelihoods of millions of rural and urban people across the globe. It is well established that NTFPs fulfill multiple functions in supporting human wellbeing. For example, the NTFPs provide the products for food, shelter, medicine, fibres, energy and cultural artefacts for many of the world’s poorest people and a considerable proportion of the less poor (Babulo *et al.*, 2009). The contribution of these daily net resources to livelihood typically ranges from 10-60 percent of total household income (Belcher *et al.*, 2005). The NTFPs also provide many households with a means of income generation, either as supplementary income to other livelihood activities, or as the primary means of cash generation (Chauhan *et al.*, 2008). Majority of the rural households in developing countries and a large proportion of urban households depend on the products to meet some part of their nutritional, health, household construction, or other needs. The NTFPs create high economic value and large-scale employment for rural people. The NTFPs has attracted global interest due to the increasing recognition of the fact that they can provide important community needs for improved rural livelihoods (Shackleton and Shackleton, 2004). In developing countries, deforestation, forest degradation, biodiversity loss and rural poverty have long been important concerns in forest governance (Hedge and Enters, 2008; Shackleton and Pandey, 2014; Saha and Sundriyal, 2012). The search for effective forest governance arrangements that meet the challenges of sustainable forest use remains an important issue. It has been proposed that long-term economic benefits from sustainable NTFP extraction might be significant enough to prevent forest from being put to more destructive land uses such as logging, mining or ranching and help lower rates of tropical deforestation (Shackleton *et al.*, 2008; Pandey *et al.*, 2011; Marshal *et al.*, 2003). It is now believed that the promotion of sustainable use of NTFPs could lead to a win-win situation for poverty reduction and biodiversity conservation and harvest with relatively little impact on the forest environment (Mahapatra *et al.*, 2015).

In Nigeria, the NTFPs value chains are complex, with multiple stages and actors involved in the process of getting the products from forest to consumer (Ohimide, 2009). They are dynamic and constantly change, and the about the quantity and quality of the information products, price and their market could be very important (Akanni, 2013; Uduji and Okolo-Obasi, 2018a). In Niger

Delta region, the market of NTFP is extremely imperfect and unstructured. At present rural people in the region collect NTFPs and sell them to local traders which in turn sell to the urban center and finally reach the consumers. The distribution channel from forest collector to urban wholesalers consists of 3-5 middlemen (Amusa *et al.*, 2012; Uduji *et al.*, 2019). The middlemen are often the agents of the traders who speak the language of the rural communities and in many cases shell out loans as advance payment for the NTFP (Jimoh and Haruna, 2007). They hustle the rural communities, cheating them on weights and rates as rural people mostly count in traditional scales and are unfamiliar with the metric measure (Onuche, 2011; Uduji and Okolo-Obasi, 2018b). The rural people have to sell their material as they need the money to buy weekly supplies (Popoola, 2002). Also, most rural people have poor access to markets, insufficient capital to invest in improving their livelihoods and little or no bargaining power when selling their products to the middlemen (Ojo, 2004). Due to lack of direct access to markets, they depend on intermediaries to sell their products, reducing their share of the income (Offiong and Ita, 2013; Uduji *et al.*, 2018a). However, on account of their potential role in livelihood and poverty alleviation, NTFPs have gained new attention in international debates that make it urgent for governments to put in place pro-poor reforms in the forest sector to protect and enhance the livelihood benefits that forests provide to the poor (Pandey *et al.*, 2016). Against this background, this paper seeks to:

- i. Examine the level of CSR intervention of MOCs in the non-timber resources of the forest for sustainable livelihood in Niger Delta, Nigeria.
- ii. Analyze the impact of GMoUs intervention of MOCs on economic empowerment of rural young people in the non-timber forest products for sustainable livelihood in Niger Delta, Nigeria.
- iii. Determine the consequences of economic empowerment of rural young people in non-timber forest products for sustainable livelihood in sub-Saharan Africa.

Plethora of CSR activities in Nigeria

Multinational companies are involved in a plethora of CSR activities in the Niger Delta and other part of Nigeria. The MOCs invest in social projects and programmes in communities of Niger Delta (Amoa, 2008). The initial investments were in agricultural development programmes in the early sixties and have grown over the years to include health care, roads and civil infrastructure, water projects, small businesses and education, which could benefit the host communities (SPDC, 2004; Amaeshi *et al.*, 2006). Over the year, MOCs have improved on how they engage with local communities to deliver these projects. In 2006, they introduced a new way of working with communities called the global memorandum of understanding (GMoU). The GMoUs represent an

important shift in CSR approach in the region, placing emphasis on more transparent and accountable processes, regular communication with the grassroots, sustainability and conflict prevention (SPDC, 2013). A GMoU is a written statement between MOCs and a group (or cluster of several communities). Clusters are based on local government or clan/historical affinity lines as advised by the relevant state government. The governing structures are well defined, with a 10-person community trust, a cluster development board (CDB) and a steering committee chaired by the state government (Alfred, 2013). The CDB functions as the main supervisory and administrative organ, ensuring implementation of projects and setting out plans and programmes. It is the decision-making committee, and the GMoU enables representatives of state and local governments, MOCs, non-profit organizations (such as development NGOs) to come together under the auspices of the CDB as the governing body (SPDC, 2013). Under the terms of GMoUs, the communities decide the development they want while MOCs provides secure funding for five years, ensuring that the communities have stable and reliable financing as they undertake the implementation of their community development plans (Chevron, 2014). By the end of 2012, MOCs had signed agreements with 33 GMoU clusters, covering 349 communities, which are about 35 percent of the local communities in the Niger Delta region (Slack, 2012; Asgil, 2012).

However, the extent to which the CSR model of MOCs has contributed to the community development in the region remains contested. Academics such as Idemudia (2007), Eweje (2007), Frynas (2005), Edoho (2008), Ekhaton (2014), Uduji and Okolo-Obasi (2017), Muthuri *et al.* (2012) and others have argued that CSR process of MOCs in the region is not far reaching or deeply entrenched. Thus, it has been contended that some of these CSR initiatives are not carried out on a coherent basis and not always sustained (Amaeshi *et al.*, 2006). Arguably, despite the adoption of various CSR mechanisms by the MOCs in the region, the oil-producing communities have received a proportionately low amount of benefit compared to the high social and environmental costs of extractive activities (Eweje, 2007). On the other hand, Ite (2006), Renouard and Lado (2012), and Lompo and Trani (2013) support CSR initiatives of the MOCs, arguing that CSR is making some progress in the area of local community initiatives in the region. For example, Lompo and Trani (2013) suggested that CSR initiatives of MOCs have contributed to access to basic capabilities like water, electricity and shelter, but have also undermined human development. Similarly, Renouard and Lado (2012) noted that the CSR initiatives of MOCs have somewhat contributed to the improvement of the material well-being of some of the people living close to oil production sites, but inequalities or relational capabilities have actually deteriorated in these communities. Following this debate, this paper seeks to investigate the level of CSR intervention of MOCs in NTFPs which

constitute an important source of livelihood for local people from forest fringe communities of the Niger Delta. The paper also aims to determine the impact of GMoUs interventions of MOCs on rural young people in the economy by generating employment and income in downstream processing and trading activities in the Niger Delta region.

Theoretical perspective

Carroll's (1991) CSR Pyramid is probably the most well-known model of CSR, with its four levels indicating the relative importance of economic, legal, ethical and philanthropic responsibilities respectively. However, the exploration of CSR in Africa by Visser (2006) was used to challenge the accuracy and relevance of Carroll's CSR Pyramid in an African context. Thus in developing countries, the absence of government action in providing amenities for its citizens accentuates the role of multinationals in CSR and philanthropy is not regarded as CSR in Western countries (Frynas, 2005). Muthuri (2012), relying on the extant literature on CSR in Africa, posited that the CSR issues prevalent in Africa include poverty reduction, community development, education and training, economic and enterprise development, health and HIV/AIDS, environment, sports, human rights, corruption and governance and accountability. According to Uduji and Okolo-Obasi (2017), philanthropic initiatives as CSR by companies are prevalent in Nigeria. Amaeshi *et al.* (2006) have argued that the Nigeria conception of CSR is remarkably different from the Western version. It is also proposed by Uduji and Okolo-Obasi (2018c) that Carroll's CSR Pyramid may not be the best model for understanding CSR in rural Africa. The above theoretical underpinnings and the contextualization of CSR from an African perspective could theoretically elucidate the probably connection between economic empowerment of rural young people in non-timber forest products and their potential benefit in sustainable livelihood from GMoUs of oil companies. This study adopts quantitative methodology, but views the outcome from Visser's Africa's perspective.

Method and materials

We adopt quantitative approach as an attempt to extend the work of Uduji and Okolo-Obasi (2018b) from the perspective of the non-timber forest products (NTFPs) for sustainable livelihood of rural young people in the Niger Delta, Nigeria. The survey research technique was used with the aim of gathering cross-sectional information from a representative sample of the population. It is essentially cross-sectional that describes and interprets what exists at present in the region.

Study area

Table 1. *Social statistics of oil producing communities in Niger Delta*

State	2006 Population	Size of the State in KM ²	Major Ethnic group	Violence Level	% Oil Production	Location of Oil	MOCs	Movement Group
Akwa Ibom	3,902,051	8,412 Km ²	Ibibio, Anang and oron	Significant	45	Off shore	Exxon Mobile, Shell, Agip	MEND, IWAAD, Afigh, Ekid, Niger Delta Avengers
Abia	2,881,380	5,834 km ²	Igbo	Moderate	10	Off shore/ On Shore	Shell, Agip, Total	IPOB, MASSOB, Niger Delta Avengers
Bayelsa	1,704,515	10,773 km ²	Ijaw, Nembe, Ogbia and Epie-Atissa	High	40	Off shore/ On Shore	Exxon Mobile, Shell, Agip, Total	MEND, IYC, Delta Avengers
Cross River	2,892,988	13,564 Km ²	Ibibio, Anang and oron, Yakkur Ogoja, Itigidi	Moderate	12	Off shore/ On Shore	Shell, Agip, Total	MEND, IWAAD, Ekid Delta Avengers
Delta	4,112,445	16,842 Km ²	Urhobo, Ijaw, Isoko, Itsekeri, and Anioma	High	38	Off shore/ On Shore	Shell Chevron, Total	IYC, Itsekiri Youth Council, Urhobo Economic foundation, MEND, Niger Delta Avengers
Edo	3,233,366	14,825 Km ²	Benin, Ishan, Akokoedo, Etsako, Esan Owan	Low	18	Off shore/ On Shore	Shell, Agip, Total	Egbesu, MEND, Niger Delta Avengers
Imo	3,927,563	5,100 km ²	Igbo, Ndoni	Moderate	10	Off shore/ On Shore	Shell, Agip, Total	IPOB, MASSOB, Niger Delta Avengers
Ondo	3,460,877	12,432 Km ²	Ijaw, Yoruba, Epie-Atissa	Moderate	10	Off shore/ On Shore	Shell Chevron, Total	OPC, MEND, Niger Delta Avengers
Rivers	5,198,716	11,077	Ndoni, Ijaw & Ikwerre, Ogoni	High	40	Off shore/ On Shore	Shell Chevron, Total, Halliburton	MOSOP and MEND, Niger Delta Avengers
Total	21,044,081							

Source: *Authors' compilation*

Sample size

To make for good responses in the study, multi-stage sampling technique was used to select the research respondents. The sample size was determined using Yamane (1964) formula for finite population as is shown in equation 1.

$$n = \frac{N}{1 + N(e)^2} \quad \text{Equation 1}$$

Where n = the sample size

N = Estimated total or finite population of the study area

e = Level of significance (limit of tolerable error)

1 = Unity (constant)

The total estimated population of the study area is (31,313,901) persons (NPC, 2007). The estimated population of the rural communities in the area is about 75 percent (23,485,426) of the total population. The estimated population of the young people in the rural communities is 38 percent (8,924,462) of the rural population in the Niger delta region (UNDP, 2006). The population of rural young people involved in non-timber forest product business is about 42 percent of the total population of the rural young people (NDDC, 2004). Hence, 3,748,274 estimated study population with confidence level (95 percent), margin of error (5 percent) and a standard deviation (0.05 percent). Thus:

$$\text{Sample size} = \frac{3,748,274}{1 + 3,748,274 * .05^2} = 400 \text{ approximately}$$

However, we purposefully multiplied the sample size by three to take the error to the lowest minimum, hence a sample size of 1,200.

Sampling procedure

The selection of the sampled respondents involved both purposive and simple random methods. In stage 1, three local government areas (LGAs) were purposely selected from each of the nine states of Niger Delta region based on the nearness to the major forest of the states. In stage 2, from each of the selected LGAs, three rural communities were purposefully selected based on their primary activities and involvements in NTFPs more than the other communities, which gave us sixty rural communities. Finally, out of the selected rural communities, twenty rural young people involved in

NTFPs were randomly selected with the help of traditional rulers, community leaders and village heads to make up the 1,200 respondent used for the study.

Data collection

Data for the study were collected using participatory rural appraisal (PRA) technique of semi-structured interview (SSI) questionnaire. The use of participatory research technique in collecting CSR impact data especially as it concerns the rural young people in MOCs host communities is based on the fact that the view of the people being studied on all the issues are paramount. The designed SSI for the study has three sections. Section one of the instrument elicited information on the socio-economic characteristics of respondent, while the other sections elicited information on the research objectives. This semi structure interview questionnaire as the major tool used for the survey was directly administered by the researchers with the help of local research assistants. The use of local research assistants was because of the inability of the researchers to speak the different languages and dialects of the many ethnic groups of Ijaws, Ogonis, Ikweres, Etches, Ekpeyes, Ogbas, Engennes, Obolos, Isokos, Nembes, Okirikans, Kalabaris, Urhobos, Iteskiris, Igbos, Ika-Igbos, Ndonis, Orons, Ibenos, Yorubas, Ibibios, Anangs, Efiks, Bekwarras, Binis, Eshans, Etsakos, Owans, etc, in the sampled rural communities.

Analytical framework

Data collected from respondents were subjected to series of treatment to enable us test the two research hypotheses:

- i. The level of CSR intervention of MOCs in the non-timber resource of the forest for sustainable livelihood in Niger Delta, Nigeria is not significant.
- ii. The GMoUs intervention of MOCs on economic empowerment of rural young people in the non-timber forest products for sustainable livelihood in Niger Delta, Nigeria is not significant.
- iii. There is no significant consequence of economic empowerment of rural young people in the non-timber forest products in sub-Saharan Africa.

Both descriptive and inferential statistics were used to analyses the data so as to achieve the research objectives. To answer the research questions, descriptive statistics of measurement of central tendency was used and the results are presented in tables and charts. But in testing the hypotheses, inferential statistical tool-estimation of logit model of receipt and non-receipt of MOCs' corporate social responsibility via GMOU by rural young people as functions of selected

socio-economic variables was used. For binominal response variables, the logistic link is the natural logarithm of the odds ratios stated thus:

$$\text{Log} [P_i/1-P_i] = \alpha_0 + \alpha_1 X_1 + \alpha_2 X_2 + \alpha_3 X_3 + \alpha_4 X_4 + \dots \alpha_n X_n \quad \text{Equation 2}$$

Hence, the impact of multinational oil company's CSR activities using GMOU on NTFPs as mean of rural young people's livelihood in the Niger Delta region was estimated using the equation below.

$$\text{Logit (YPE)} = \beta_0 + \beta_1 \text{Gmou} + \beta_2 \text{Age} + \beta_3 \text{Gen} + \beta_4 \text{PriOcc} + \beta_5 \text{HHSIZE} + \beta_6 \text{Edu} + \beta_7 \text{ONTfpsY} + \beta_8 \text{Exp} + \beta_9 \text{MS} + \beta_{10} \text{YOHM} \quad \text{Equation 3}$$

Where:

GMOU = Multinational Oil Companies (MOCs)'s corporate social responsibility using GMOU (total amount received by the rural household valued in Nigeria naira (NGN). The actual variable considered here is investment in NTFPs collection, processing and marketing embarked upon by the MOCs using the GMOU as acknowledged by the rural young people).

Age = Age of the respondent

Gen = Sex of the respondent

PriOcc = Primary occupation of the respondent (full-time in NTFPs =1, otherwise 0)

HHSIZE = Household size of the respondent

Edu = Highest level of education of the respondent

ONTfpsY = Off non-timber forest products income of the respondents

Exp = Experience of the respondents in non-timber forest products livelihood

MS = Marital status of the respondents

YOHM = Income of other household members

*In this model, the main parameter of interest is β_1 in terms of sign and significance.

Explanatory variables

Given the sample size, ten important covariates were included so as to maintain reasonable degrees of freedom in the estimates. The corporate social responsibility (CSR) of the MOCs using general memorandum of understandings (GMOUs), which is our main variable of interest, was included as one of the covariates. It is measured here as total receipt of resources by the rural young people from the MOCs under GMOU model in provision of critical factors for investing in non-timber

forest products business. Also included is the off-NTFPs income of the respondents, specified as total income less income from NTFPs related activities and receipts from the GMoU expressed in Nigeria naira (NGN). This is to say that other sources of income were excluded from the measure of income of the household involved in NTFPs and included as a separate covariate, to be able to properly disentangle the effect of the off-NTFPs income in the area of access to critical factors of NTFPs harvesting, processing and marketing from those of other income sources. Household size is another covariate that was included because it is believed to be an important factor in productivity as well as consumption. Also of high importance is Age of the respondent which was included as it plays a major role in accepting or rejecting changes. A primary occupation dummy was used to account for the differential effects of being either in full-time or part-time in the NTFPs business. Other variable used is highest educational qualification of the respondent measured in total number of years spent in attending formal schooling. This plays a major role as it is believed that, the higher the level of education, the higher the tendency to accept changes. Another covariant included is experience of the respondent in the industry which is believed to have a high influence on investment in the business.

Results

The analysis of the rural young people in the non-timber forest products begins with a description of some of the social (gender, education), demographic (age, marital status, household size), and economic (occupation, household income) characteristics (Table 2). These characteristics are important in understanding the difference in the socio-economic status of the rural young people who are participating in the GMoUs compared with their non-participating counterparts in rural communities of Niger Delta. Analysis (Table 2) shows that out of the 1200 respondents interviewed, 62% were involved in NTFPs business full-time; whereas the remaining 38% were in NTFPs business as part-timers who were petty traders, farmers, fishers or engaged in other paid employment that is not related to NTFPs business. This finding proves centrally to the previous finding of UNDP (2006) in that most of the rural young people have not joined the militant groups and engaged in sabotage of oil company equipment.

Table 2: Socio – Economic Characteristics of the Rural Household Head

Variables	Frequency	%	Cumulative
Sex			
Males	415	35	35
Females	785	65	100
	1200	100	
Primary Occupation	Frequency	%	Cumulative
Farming	284	24	24
Trading	38	3	27
Fishing	93	8	35
Government/Private Paid Employment	37	3	38
NTFPs Farming	748	62	100
	1200	100	
NTFPs Farming Status	Frequency	%	Cumulative
Part time	452	38	38
Full time	748	62	100
	1200	100	
Years of Experience in NTFPs	Frequency	%	Cumulative
0- 5 Years	126	11	11
6 - 10 Years	206	17	28
11 - 15 Years	248	21	48
16 - 20 Years	282	24	72
Above 20 Years	338	28	100
	1200	100	
Age of Respondents	Frequency	%	Cumulative
Less than 20 years	135	11	11
21-30 years	185	15	27
31-40 years	285	24	50
41- 50 years	307	26	76
51- 60 years	179	15	91
Above 60 years	109	9	100
	1200	100	
Level of Education	Frequency	%	Cumulative
None	276	23	23
FSLC	593	49	72
WAEC/WASSCE	253	21	94
B.Sc and Equivalent and above	78	7	100
	1200	100	
Marital Status	Frequency	%	Cumulative
Single	166	14	14

Married	669	56	70
Widow	172	14	84
Divorced	112	9	93
Separated	81	7	100
	1200	100	
Household Size	Frequency	%	Cumulative
1-4 Person	698	58	58
5-9 Person	309	26	84
10-14 Person	151	13	97
15 Person and above	42	4	100
	1200	100	
Annual Off NTFPs Income	Frequency	%	Cumulative
1000 - 50,000	62	5	5
51,000 - 100,000	175	15	20
101,000 - 150,000	360	30	50
151,000 - 200,000	202	17	67
201,000 - 250,000	173	14	81
251,000 - 300,000	156	13	94
Above 300,000	72	6	100
	1200	100	200
Annual NTFPs Income Level	Frequency	%	Cumulative
1000 - 50,000	65	5	5
51,000 - 100,000	272	23	28
101,000 - 150,000	326	27	55
151,000 - 200,000	255	21	77
201,000 - 250,000	155	13	89
251,000 - 300,000	62	5	95
301,000 - 350,000	38	3	98
351,000 - 400,000	19	2	99
Above 400,000	8	1	100
	1200	100	

Source: Authors' computation

Analysis (Figure 2) shows that MOCs via GMoU invested 18% in the health sectors, mostly for the urban hospital; infrastructure and housing development received 8%; while fishing and fishing related activities received 5%. On the other hand, skill acquisition and entrepreneurship training received 12%; while education received 23% which is the highest. Chieftaincy matters surprisingly received 10% even more than the agriculture and rural farming that received only 7%. This finding supports Uduji and Okolo-Obasi (2017) in that the GMoUs interventions might have been tilted to

suit the chiefs and traditional rulers, the urban dweller against the majority who lives in the rural communities. The 1% entitled to NTFPs (Figure 2) suggests that the attention of MOCs interventions have not been drawn to NTFPs farmers as a focused group that lives in rural areas and works mainly in the forests.

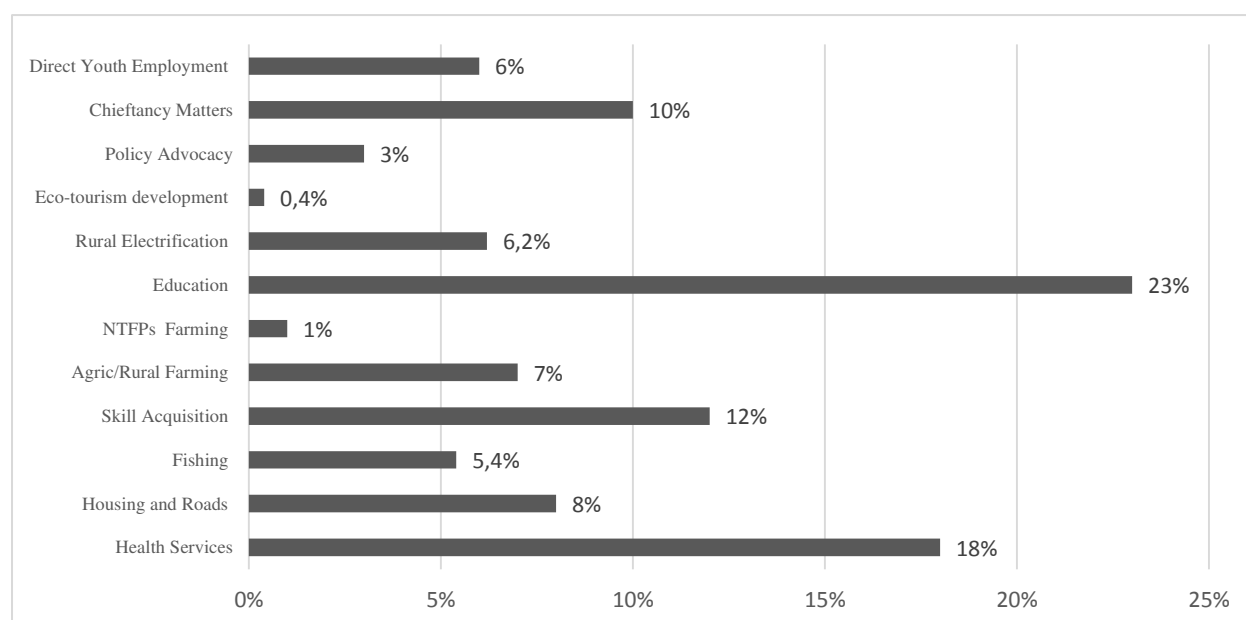


Figure2. Type and scope of CSR embarked upon by the MOCs in the rural communities of Niger Delta

Source: Authors' computation

Analysis (Figure 3) shows that out of the 1200 rural young people interviewed, only about 4.5% have received GMoU intervention in support for NTFPs business. This finding agrees with Amusa *et al.*(2012) in that GMoUs have not supported NTFPs which encourages plant use for food, beverages, forage, fuel, medicine, fibre and biochemical; animals, birds and fish for food, fur and feathers; as well as their products such as honey, lack and silk. Just as well, the finding concurs with Belcher *et al.*(2005) in that today's interest in NTFPs should be based on the argument that in order to conserve the world's tropical forests, we have to find new products, develop new markets and improve marketing systems for NTFPs, so that the tropical forests will become far too valuable to be ignored by an intervention programme.

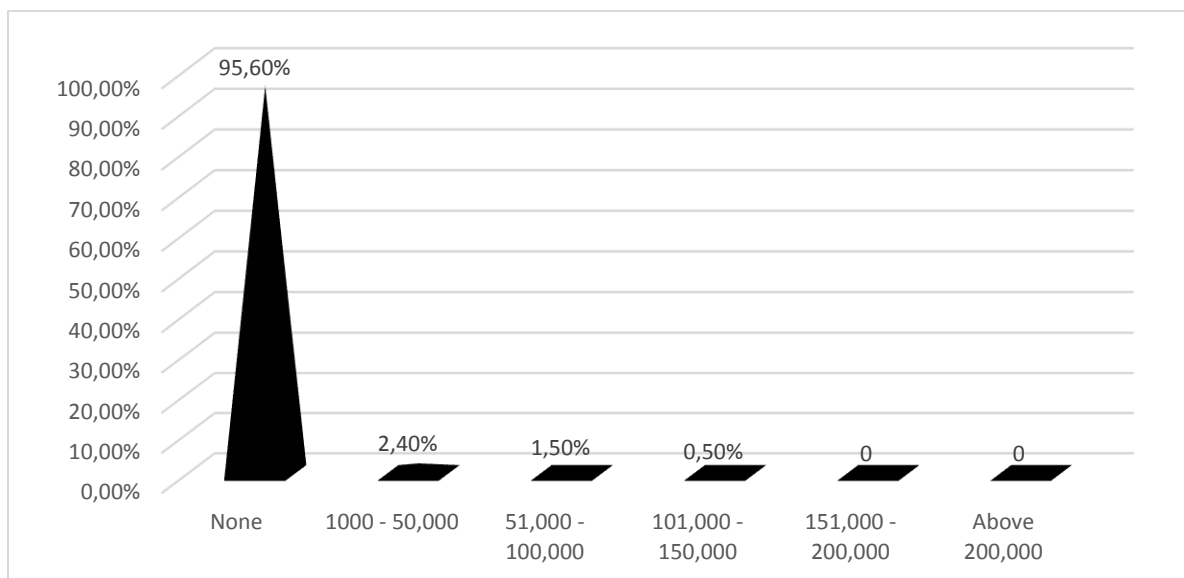


Figure3. Rate of receipt of intervention in the NTFPs livelihood from the MOCs

Source: Authors' computation

Analysis (Figure 4) indicates that the interventions in the NTFPs core needs aggregated to zero from the MOCs, while the minimal interventions observed was not primarily targeted at NTFPs. Hence, this suggests that the NTFPs business received no direct intervention from the MOCs in Niger Delta communities. This finding calls for GMoUs in using forest sustainability for the benefits of the rural young people, wider society and particularly the rural population as a whole. This is in conformity with Shackleton *et al.*(2014) in that NTFPs is the potential pillars for sustainable livelihood in rural communities.

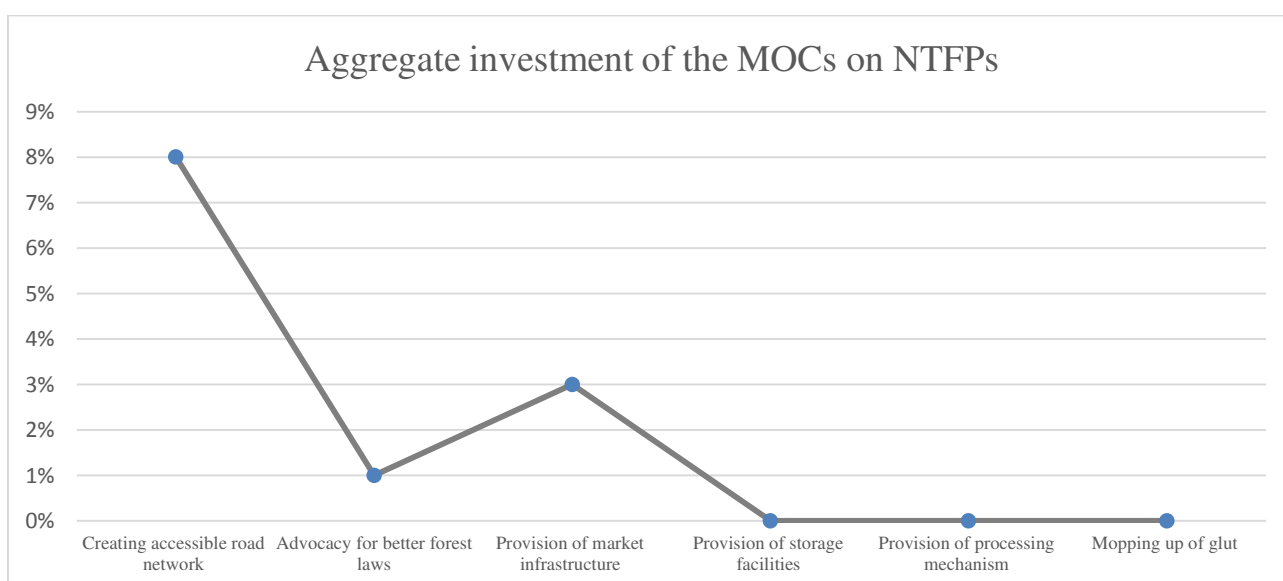


Figure4. Aggregate intervention of the MOCs in NTFPs livelihood in Niger Delta

Source: Authors' computation

Analysis (Figure 5) shows that 65% of the young people involved in NTFPs are collectors, while 25% are involved in processing especially in the area of medicine. Also 23% are involved in marketing of the product, whether processed or not. Further (Figure 5), we noticed that, the 23% involved in marketing takes away about 40% of the proceed, while 12% takes away 25%, and the whopping 65% takes only 35 percent of the proceeds. From this we noticed that there is a serious middlemen activity in this NTFPs sector. This shows that, if GMoUs interventions for rural dwellers that are the collector, in the area of processing and assess to market, many household will be lifted out of poverty. Saha and Sundriyal (2012) agree in that it is not in the interest of local people, be they forest dwellers or not, to remain in non-market economies.

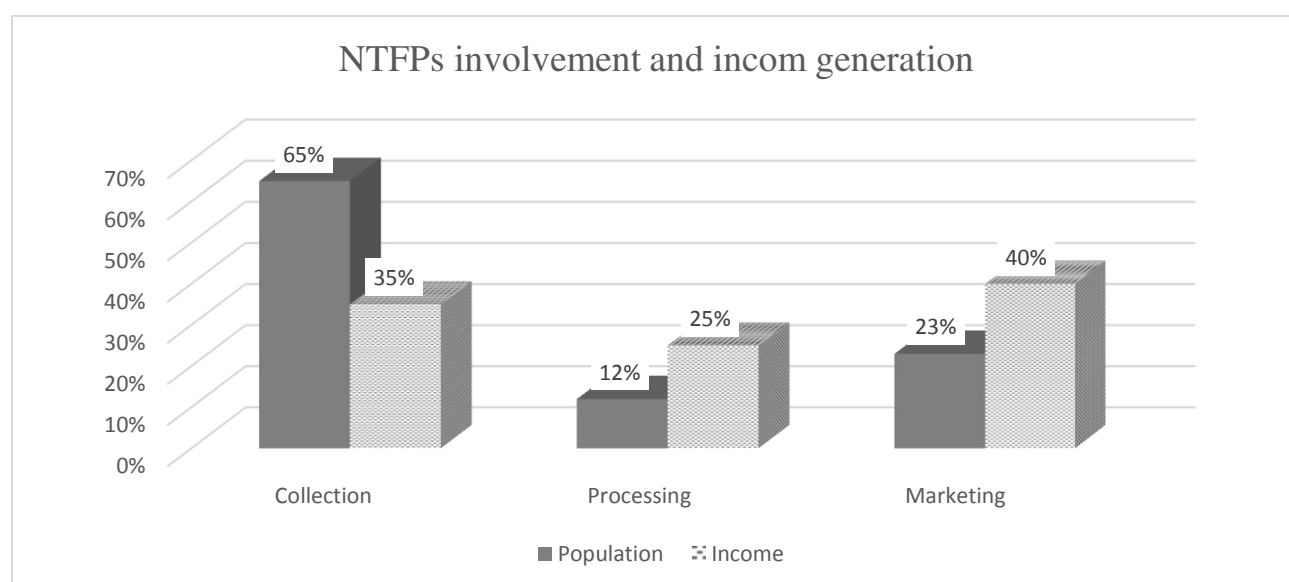


Figure5. *NTFPs involvement and income generation by rural young people*

Source: *Authors computation*

Interest of the rural young people in NTFPs collection and indigenous knowledge of the Niger Delta communities in collection and processing are still growing. In many communities the returns to labour in alternative employment are more attractive than migrating to urban areas. According to Uduji and Okolo-Obasi (2018b) the majority of the rural people in the Niger Delta region will still rely on fuel wood for domestic cooking and heating, in spite of the improved cook stoves that have been introduced in the rural communities to reduce the demand for fuel wood.

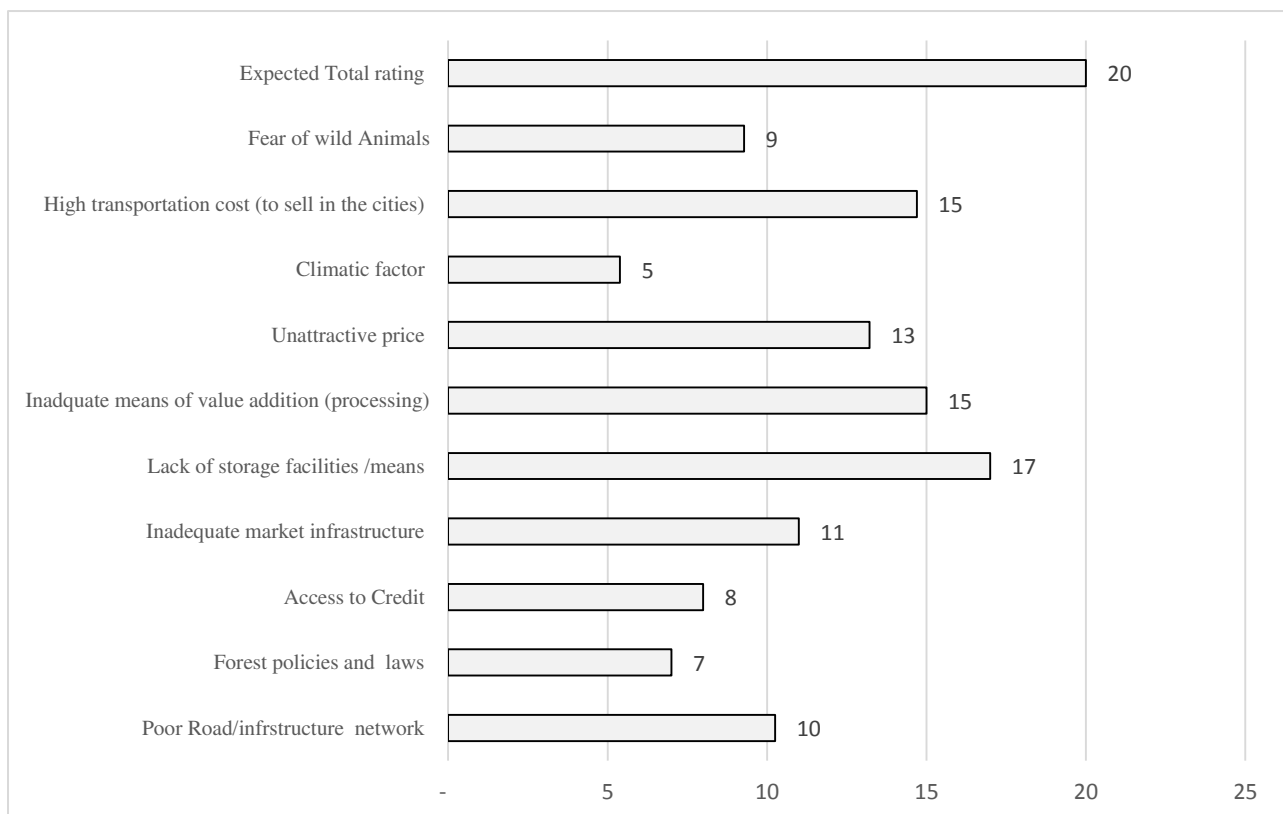


Figure 6. *Major constraint and intervention area needed in the NTFPs as a source of family livelihood*
Source: Authors' computation

Analysis (Figure 6) rates the major challenges in NTFPs collection, and the responses reveals that lack of storage facilities and mean of storage topped the chart; every other major problems hinges on them. This suggests that if the collectors can preserve and store their products it will reduce the give-away temptation price and add more value to the products they market for sustainable livelihood.

Discussion

The illustration (Figure 7) summarized the average perception rating of GMoUs by rural young people in Niger Delta, Nigeria.

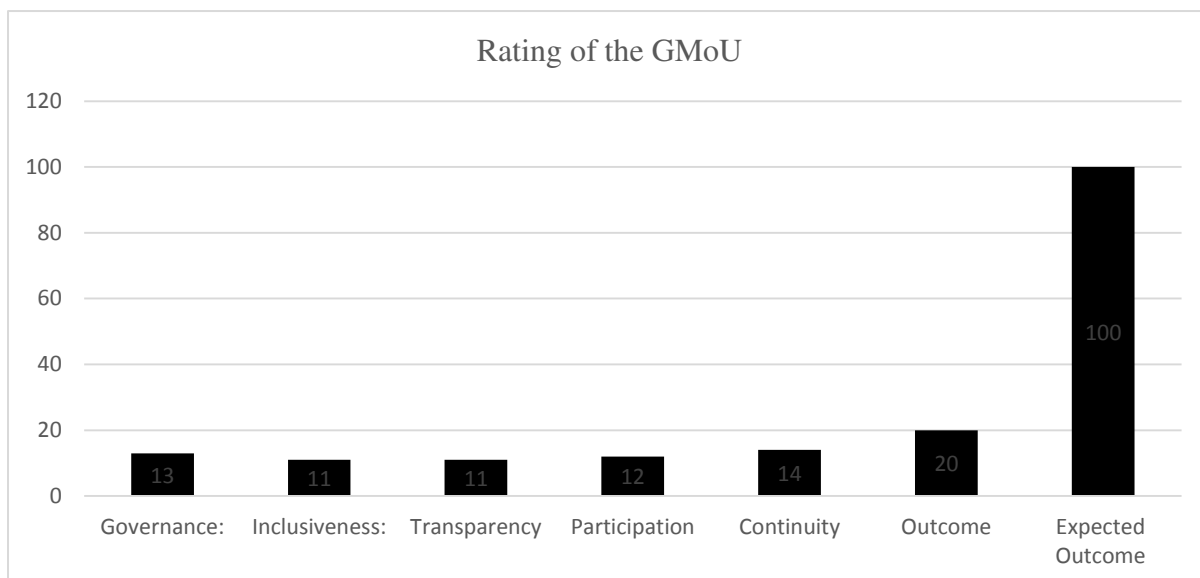


Figure 7. *Rating of the GMoUs interventions by rural young people in Niger Delta.*

Source: *Authors' computation*

From the analysis, the overall rating of the governance criteria for rating the impact of the GMoUs is 13%, inclusiveness 11%, transparency 11%, Participation 12%, continuity 14% and outcome is 20%, with overall average of 13.5%. This suggests that the structure of that the structure of the GMoUs from the youths' perspective is not sensitive to rural young people in the region. This finding supports Frynas (2005) in that communities in the Niger Delta still have negative view of MOCs operations in terms of their employment and community development projects. Also, it could have contributed to the rise of militant youth groups that aligned themselves with chiefs and engage in vandalization of MOCs properties in the region.

Table 3: Projected effects of multinational oil firms' CSR intervention via GMOU on NTFPs in the rural communities of the Niger Delta

		B	S.E.	Wald	Df	Sig.	Exp(B)	95.0% C.I. for EXP(B)	
		Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper
Step 1(a)	Age	.037	.009	3.205	1	.073	.983	.966	1.002
	PriOcc	-.319	.212	.033	1	.856	.962	.635	1.459
	HHSIZE	.431	.021	.492	1	.483	.986	.947	1.026
	Edu	-.007	.021	.652	1	.419	1.017	.977	1.059
	ONTfpsY	-.016	.114	.715	1	.398	.908	.727	1.135
	YOMH	-.017	.115	.171	1	.679	.954	.761	1.194
	Exp	.321	.124	2.895	1	.029	1.810	.635	1.033
	MS	-.013	.135	.291	1	.038	1.930	.713	1.212
	Gender	-.319	.312	.033	1	.456	.562	.435	1.459
	GMOU	1.241	.061	5.174	1	.003	11.143	1.045	1.443
	Constant	1.816	.667	1.940	1	.164	5.131		

a Variable(s) entered on step 1: Age, PriOcc, HHSIZE, Edu, ONTfpsY, YOMH, Exp, MS, GMOU, Gender.

Source: Authors' computation

Table 4: Z Value table of analysis of the impact of multinational oil companies' CSR via GMOU on NTFPs livelihood of rural young people in Niger Delta.

Predictor Variable	Coefficient	Z - Value
		$z = \frac{\hat{B}}{SE}$
Age	0.037	3.205
	(.019) ^a	(.073) ^b
PriOcc	-.319	.033
	(.142) ^a	(.856) ^b
HHSIZE	.431	.492
	(.013) ^a	(.483) ^b
Edu	-.007	.652
	(.012) ^a	(.419) ^b
ONTfpsY	.016	.715
	(.042) ^a	(.398) ^b
YOMH	.017	.171
	(.053) ^a	(.679) ^b
Exp	.321	2.895
	(.132) ^a	(.029) ^b
MS	.013	.291
	(.130) ^a	(.038) ^b
Gender	-.319	.033
	(.205) ^a	(.456) ^b
GMOU	1.241*	5.174
	(.052) ^a	(.003) ^b
Constant	1.816	1.940
	(.667) ^a	(.164) ^b

* Significant at 5%; - a = this only refers to standard error (SE) b= Associated P Value of the Z value

Source: Authors' computation

A logistic regression analysis was conducted to predict the impact of GMOU on economic empowerment of rural young people in non-timber forest products for sustainable livelihood using the variables in equation above as predictors.

$$\text{Logit (YPE)} = 1.816 + 1.241\text{GMOU} + .037\text{Age} + (.319) \text{PriOcc} + .431\text{HHSIZE} + (.007) \text{Edu} + (.016)\text{ONTfpsY} + (.319) \text{Gender} + (.017) \text{YOMH} + .321\text{Exp} + .013\text{MS}$$

A test of the full model against a constant only model was statistically significant, indicating that the predictors as a set reliably distinguished between the “yes” and “no” impact of CSR (chi square = 45.210, $p < .000$ with $df = 8$). Nagelkerke’s R^2 of .916 indicated a strong relationship between prediction and grouping. Prediction success overall was 92%. (94% for yes and 90% for the no). The Z- value for GMOU is 5.174, with an associated p-value of .013. Based on the set 5% significant level, the study concluded that CSRs of the MOCs under GMOU have not made a significant impact on *the NTFPs as means of Livelihood among the rural young people*. However, the EXP (B) value of the Predictor – GMOU is 11.143, this implies that if the MOCs raise their CSR Program targeted to improve investment in the NTFPs Industries of rural young people by one unit, equivalent of 1USD, the odds ratio is 11.1 times as large and therefore rural household are 11.1 times more likely to invest in any area of the NTFPs either in collection, processing or marketing.

It is apparent for the results of this study that the contribution of NTFPs to sustainable livelihood of rural young people in the Niger Delta. They contribute to improving nutrition as part of the family diet and as a means to achieve household income and food security. The results have also established that a significant number of rural young people derive a significant part of their food, nutrition, healthcare needs and income from NTFPs. They also contribute to the well-being of rural young people, particularly the poor, in terms of food security, nutrition health and subsistence. However different types of information, such as price, value addition options and sustainable harvesting techniques would be required by the rural young people to increase their bargaining power and receive higher prices for their products. A social networking forum for rural young people should be developed for exchanging market information within different stakeholders. To sell NTFPs at fair prices, rural young people would need access to an open and efficient market. Collective marketing approach as an NTFP–GMOUs based intervention can support rural young people with knowledge, confidence and processes to operate as a non-exploitative channel for the marketing products. MOCs intervention for creating such a market would generate higher revenue and offer a strong incentive for rural young people to take on increasing responsibility for forest management and promote more efficient forest utilization in Niger Delta, Nigeria.

Overall, the findings of this study concur with Visser (2006), Amaeshi *et al.* (2006) and Uduji *et al.* (2018b) in that the relative priorities of CSR in Africa should be different from the classic Western version. The finding suggests the importance of cultural context in the determination of appropriate CSR priorities and programmes in rural Niger Delta, Nigeria. However, in extension and contribution, if MOCs are to work towards an ideal CSR in rural sub-Saharan Africa, we would argue that sustainable livelihood should be assigned the highest CSR priority. It is our contention that MOCs holds the key to sustainable livelihood for host communities through a business case for stakeholders. Augmenting livelihoods of the rural young people would require GMoUs focused intervention on NTFPs. Facilities pertaining to storage, grading, processing and value addition through convergence of existing schemes and programmes for rural young people should be created and promoted. Rural young people should be empowered with information about the market, policy and products to enable them strategizing and accessing better from NTFPs.

Concluding remarks, caveats and future research directions

Thus far, we assess the impact of a new CSR model of MOC on non-timber forest products for sustainable livelihood of rural young people in Niger Delta, Nigeria. The paper contributes to the young people debate in sustainable livelihood by assessing the empirical evidence from CSR perspective in three areas that have received much attention in the literature. The three areas of focus equally represent three main research questions, notably:

- i. What is the level of CSR intervention of MOCs in the non-timber resource of the forests for sustainable livelihood in Niger Delta, Nigeria?
- ii. Do GMoUs interventions of the MOCs impact on economic empowerment of rural young people non-timber forest products for sustainable livelihood in Niger Delta, Nigeria?
- iii. What are the consequences of economic empowerment of rural young people in non-timber forest products for sustainable livelihood in sub-Saharan Africa?

Using logit model, results indicate that GMoUs of MOCs have not given adequate attention to the young people as a special target subgroup who live in rural areas and depend mostly on non-timber resources of the forest. Meanwhile, a number of factors, including a policy vacuum, non-destructive harvesting, destruction of natural habitats, bushfires, population growth and high demands, are hindering the use and development of NTFPs for rural youth livelihood in Niger Delta region. An appropriate intervention framework for a sustainable promotion of NTFPs, domestication of NTFPs, improving harvesting and processing techniques are necessary to facilitate food security, reduction of poverty and improved livelihoods, particularly for the economically-marginalized and

forest-dependent rural young people in Niger Delta region. Sustaining livelihoods of the forest dependent rural young people in the region would require some focused GMoUs intervention on the NTFPs. Facilities pertaining to storage, grading, processing and value addition through convergence of existing schemes and programmes in rural areas should be promoted and created for participating young people. For sustained traditional livelihood, GMoUs interventions of MOCs should empower the rural young people with information about the market, policy and products to enable them strategizing and accessing returns from NTFPs in sub-Saharan Africa.

The main caveat of this study is that it is limited to the scope of rural areas in sub-Saharan Africa. Hence, the findings cannot be generalized to other developing regions of the world with the same policy challenges. In the light of this shortcoming, replicating the analysis in other regions is worthwhile in order to examine whether the established nexus withstand empirical scrutiny in different rural context of developing countries of the world.

Disclosure statement

This manuscript has not been submitted simultaneously for publication elsewhere. Funding was provided by the authors. There is no potential conflict of interest reported by the authors.

References

- African Development Report (2015). *Growth, Poverty and Inequality: Overcoming barriers to sustainable development*. Abidjan: African Development Bank.
- Akanni, K.A. (2013), "Economic benefits of non-timber forest products among rural communities in Nigeria", *Environmental and Natural Research*, Vol.3 No.4, pp.19-26.
- Alfred, C. (2013), "Global memorandum of understanding: An analysis of Shell Petroleum Development Companies current development model in Nigeria Delta", *International Journal of Innovative Social Science and Humanities Research* Vol.2 No.1, pp.1-14.
- Amao, O. (2008), "Corporate social responsibility, multinational companies and the law in Nigeria: Controlling multinationals in host states", *Journal of Africa Law*, Vol. 52 No.1, pp.89-113.
- Amaeshi, K. and Amao O. (2009), "Corporate social responsibility in transnational spaces:

Exploring influences of varieties of capitalism on expressions of corporate codes of conduct in Nigeria”,*Journal Business Ethics*, Vol.86 No.2, pp. 225-239.

Amusa, T.O., Jimoh, S.O., and Azeez, I.O. (2012), “Determining the local importance of non-timber forest products using two different prioritization techniques”,*International Journal of Agriculture and Forestry*, Vol. 2 No.1, pp. 84-92.

Asfaw, A., Lemenih, M., Kassa, H., and Ewnetu, Z. (2013), “Importance, determinants and gender dimensions of forest income in eastern highlands of Ethiopia: The case of communities around Jelo Afromontane forest”,*Forest Policy and Economics*, Vol.28, pp.1-7.

Asgil, S. (2012), “The Nigerian extractive industries transparency initiatives (NEITI): Tool for conflict resolution in the Niger Delta or arena of contested politics?”*Critical Africa studies*, Vol. 7, pp. 4-57.

Babulo, B., Muys, B., Nega, F., Tollens, E., Nyssen, J., Deckers, J., and Mathijs, E. (2009), “The economic contribution of forest resource use to rural livelihoods in Tigray, Northern Ethiopia”,*Forest Policy and Economics*, Vol. 11 No.2, pp.109-117.

Belcher, B., Ruiz-Perez, M., and Achdiawan, A. (2005), “Global patterns and trends in the use and management of commercial NTFPs: Implications for livelihoods and conservation”,*World Development*, Vol.33, pp. 1435-1452.

Boele, R., Fabig, H., and Wheeler, D. (2001), “The story of Shell, Nigeria and the Ogoni people-environment, economy, relationships: Conflict and prospects for resolution”,*Sustainable Development*, Vol.9 No.2, pp.7-86.

Carroll, A.B. (1991). The pyramid of corporate social responsibility: Towards the moral management of organizational stakeholders. *Business Horizons*, 34:39-49.

Chambers, R., and Conway, G. (1992), *Sustainable rural livelihoods*. Practical concepts for the 21st century. Discussion Paper 296. IDS, Sussex.

Chauhan, K.V.S., Shama, A.K., and Kumar, R. (2008), “Non-timber forest products substance and commercial uses: Trends and future demands”, *International Forestry Review*, Vol.10, pp.201-

Chevron. (2014), "Corporate responsibility report of chevron in Nigeria", Policy, Government & Public Affairs (PGPA) Department, Chevron Nigeria Limited, Lagos, Nigeria.

Chevron. (2017), "Roots of change: Chevron's model community empowerment programmes in the Niger Delta", Chevron Nigeria Limited, Lagos, Nigeria.

Edoho, F.M. (2008), "Oil transnational corporations: Corporate social responsibility and environmental sustainability", *Corporate Social Responsibility and Environmental Management*, Vol.15 No.1, pp. 210-222.

Ekhatior, E.O. (2014), "Corporate social responsibility and Chinese oil and gas industry of Nigerian oil industry", *Business and Society Review*, Vol.112 No.3, pp. 369-405.

Eweje, G. (2007), "Multinational oil companies CSR initiatives in Nigeria: The scepticism of stakeholders in host communities", *Managerial Law*, Vol. 49 No.516, pp.218-235.

FAO. (2006), *Can non-wood forest products help contribute to achieving the millennium development goals?*, Food and Agriculture Organization: Rome.

FGN. (2017), *Economic recovery and growth plan: 2017 – 2020*, Federal Government of Nigeria, Ministry of Budget and National Planning. Abuja, Nigeria.

Frankenberger, T.R. (2000). *A brief overview of sustainable livelihoods approaches*. Proceeding from the Forum on Operationalizing Sustainable Livelihoods Approach. Department for International Development (DFID). Pontignano (Siena) 7-11 March 2000.

Frynas, J. (2005), "The false development promise of corporate social responsibility: Evidence from multinational oil companies", *International Affairs*, Vol. 81 No.3, pp.581-598.

Hedge, R., and Enters, T. (2000), "Forest products and household economy: A case of study from mudumalai wildlife sanctuary, southern India", *Environmental Conservation*, Vol. 27 No.3, pp. 250-259.

- Idemudia, U. (2007), “Community perceptions and expectations: Reinventing the wheels of corporate social responsibility practices in the Nigerian oil industry”, *Business and Society Review*, Vol.112 No.3, pp. 369-405.
- IMF. (2013). *Regional economic Outlook, sub-Saharan Africa: Building Momentum in all multi-speed world*, African Department, May 2013. Washington, DC: International Monetary Fund.
- IMF. (2017). *Regional economic outlook, sub-Saharan Africa*. May 2017. Washington DC: International Monetary Fund.
- Ite, U.E. (2006), “Changing times and strategies: Shell’s contribution to sustainable community development in the Niger Delta, Nigeria”, *Sustainable Development*, Vol.15 No.1, pp. 1-14.
- Jimoh, S.O., and Haruna, E.A. (2007), “Contributions of non-timber forest products to household food security and income around Onigambari forest reserve, Oyo state, Nigeria”, *Journal of Environmental Extension*, Vol.6, pp. 28-33.
- Lompo, K., and Trani, J.F. (2013), “Does corporate social responsibility contribute to human development in developing countries? Evidence from Nigeria”, *Journal of Human Development and Capabilities: A Multi-Disciplinary Journal for People – Centered Development*, Vol.14, pp.241-265.
- Marchant, M. (2014), “Corporate social responsibility and oil in the Niger Delta: Solution or part of the problem?”, United Nations Research Institute for Social Development (UNRISD).
- Marshall, E., Newton, A.C., and Schreekenberg, K. (2003), “Commercialization of non-timber products: First steps in analyzing the factors influencing success”, *International Forestry Review*, Vol.5 No.2, pp.128-137.
- MNDA. (2015), *Security and stabilization policy for the Niger Delta*, Ministry of Niger Delta Affairs: Abuja.
- Muthuri, J., Moon, J., and Idemudia, U. (2012), “Corporate innovation and sustainable community

development in developing countries. *Business and Society*, Vol. 51 No3, pp.355-381.

NNDC. (2004),*Niger Delta regional development master plan*, Niger Delta Development Commission (NNDC): Port Harcourt, Nigeria.

NPC. (2007), “Reports of Nigeria’s national population commission on 2006 census”,*Population and Development Review*, Vol. 33 No1, pp.206-210.

Omeje, K.C. (2006),*High stakes and stakeholders: Oil conflict and security in Nigeria* Ashgate: Aldershot.

Pandey, A.K., Bhargara, P., and Negi, M.S. (2011), “Sustainable management of non-timber forest produce through joint forest management”,*The Indian Forester*, Vol.137 No.8a, pp.105-113.

Pandey, A.K., Tripathi, Y.C., and Kuma, A. (2016), “Non-timber forest products (NTFPs) for sustained livelihood: Challenges and strategies. *Research Journal of Forestry*, 10, 1-7.

Popoola, L. (2002). Prevalence of, and conservation strategies for non-timber forest products in the sudano-Sahelian zone of Nigeria”,*Nigeria Journal of Ecology*, Vol. 4 No.1, pp.24-33.

Offiong, E.E., and Ita, P.B. (2013), “Non-timber forest products for food security and development in Nigeria”,*American Journal of Social Issues and Humanities*, Vol.3 No.4.

Ojo, L.O. (2004), “The fate of a tropical rainforest in Nigeria: Abekun sector of Omo forest reserve”, *Global Nest*, Vol.6 No.2, pp.116-130.

Olumide, J.O. (2009), “Ensuring food security through optimizing the marketing of non-timber forest products in Oyo state, Nigeria”, *African Crop Science Proceedings*, Vol. 9, pp.773-776.

Onuche, P. (2011), “Non-timber forest products (NTFPs): A pathway for rural poverty reduction in Nigeria”, *International Journal of Economic Development Research and Investment*, Vol. 2 No.2, pp.28-37.

PIND. (2011),*Niger Delta region youth assessment*, Foundation for Partnership Initiatives in the Niger Delta (PIND): Abuja, Nigeria.

PIND/UNDP. (2011),*Economic opportunities in the Niger Delta*, Foundation for Partnership Initiatives in the Niger Delta (PIND): Abuja, Nigeria.

Renouard, C., and Lado, H. (2012),“CSR and inequality in the Niger Delta (Nigeria)”,*Corporate Governance: The International Journal of Business in Society*, Vol.12 No.4, pp.472-484.

Saha, D., and Sundriyal, R.C. (2012),“Utilization of non-timber forest products in humid tropics: Implications for management and livelihood”,*Forest Policy and Economics*, Vol.14 No.1, pp. 28-40.

Shackleton, C.M., and Pandey, A.K. (2014),“Positioning non-timber forest products on the development agenda”,*Forest Policy and Economics*, Vol.38, pp.1-7.

Shackleton, C.M., and Shackleton, S. (2004),“The importance of non-timber forest products in rural livelihood security and as safety net: A review of evidence from South Africa”,*South African Journal of Science*, Vol.100, pp. 658-664.

Shackleton, S., Campbell B., Lotz-Sisitka,H., and Shackleton, C. (2008),“Links between the local trade in natural products, livelihoods and poverty alleviation in a semi-arid region of South Africa”,*World Development*, Vol. 36 No.3, pp.505-526.

Slack, K. (2012),“Mission impossible? Adopting a CSR-based business model for extractive industries in developing countries”,*Resource Policy*, Vol.37, pp.179-184.

SPDC. (2004),*People and the environment: 2003 annual report*, Shell Petroleum Development Company of Nigeria Limited: Lagos, Nigeria.

SPDC (2013),*Shell in Nigeria: Global memorandum of understanding*, Shell Petroleum Development Corporation (SPDC): Port Harcourt, Nigeria.

- Uduji, J.I., & Okolo-Obasi, E.N. (2017). Multinational oil firms' CSR initiatives in Nigeria: The need of rural farmers in host communities. *Journal of International Development*, 29(3), 308-329, <http://doi.org/10.1002/jid.3243>
- Uduji, J.I. & Okolo-Obasi, E.N. (2018a). Young rural women's participation in the e-wallet programme and usage intensity of modern agricultural inputs in Nigeria. *Gender, Technology and Development*, 22(1): 59-81, <http://doi.org/10.1080/09718524.2018.1445894>
- Uduji, J.I., & Okolo-Obasi, E.N. (2018b). Adoption of improved crop varieties by involving farmers in the e-wallet programme in Nigeria. *Journal of Crop Improvement*, 32(5): 717-737, <http://doi.org/10.108/1547528.2018.1496216>
- Uduji, J.I., & Okolo-Obasi, E.N. (2018d). Corporate social responsibility initiatives in Nigeria and rural women livestock keepers in oil host communities. *Social Responsibility Journal*, <https://doi/10.1108//SRJ-01-2018-0025>
- Uduji, J.I., Okolo-Obasi, E.N., & Asongu, S.A. (2018a). The impact of e-wallet on informal farm entrepreneurship development in rural Nigeria. *The Electronic Journal of Information Systems in Developing Countries*, <https://doi/10.1002/isd2.12066>
- Uduji, J.I., Okolo-Obasi, E.N., & Asongu, S.A. (2018b). Does CSR contribute to the development of rural young people in cultural tourism of sub-Saharan Africa? Evidence from the Niger Delta in Nigeria. *Journal of Tourism and Cultural Change*, <https://doi.org/10.1080/1476682.2018.1502777>
- Uduji, J.I., Okolo-Obasi, E.N., & Asongu, S.A. (2019a). Responsible use of crop protection products and Nigeria's growth enhancement support schemm. *Development in Practice*, <https://doi/10.1080/09614524.2019.1572713>
- Uduji, J.I., Okolo-Obasi, E.N., & Asongu, S.A. (2019b). Corporate social responsibility and the role of women in sustainable agricultural development in sub-Saharan Africa: Evidence from the Niger Delta in Nigeria. *Sustainable Development*, <https://doi.org/10.1002/sd.1933>
- Uduji, J.I., & Okolo-Obasi, E.N. (2018c). Does corporate social responsibility (CSR) impact on development of women in small-scale fisheries of sub-Saharan Africa? Evidence from coastal communities of Niger Delta in Nigeria. *Marine Policy*, <https://doi.org/10.1016/j.mapol.2018.10.036>

- UN. (2006). *Millennium development goals report 2006*. Brussels: United Nations.
- UNDP. (2006), “Niger Delta human development report”, United Nations Development Programme, Abuja, Nigeria.
- UNDP. (2013). *Poverty in focus no. 25*. International Policy Center for Inclusive Growth, September 2013. Brasilia: United Nations Development Programme.
- UNDP. (2016), *United Nations Development Programme (UNDP)*. New York: Oxford University Press.
- Visser, W. (2006). Revisiting Carrolls CSR Pyramid: An African perspective. In E.R. Perderson & M. Huniche (eds), *Corporate Citizenship in Developing Countries*, Copenhagen: Copenhagen Business School Press, 29-56.
- Watts, M. (2004), “Resource curse? Governmentality, oil and power in the Niger Delta” *Geopolitics*, Vol. 9, No.1, pp. 50-80.
- World Bank. (2008), *Republic of Nigeria: Niger Delta social and conflict analysis*. Sustainable Development Department of Africa Region: Washington, D.C.
- World Bank. (2014), *An analysis of issues shaping Africa’s economic future*. Africa’s pulse, vol. 10 October 2014. Washington, DC: World Bank.
- Yamane, T. (1964), *Statistics: An introductory analysis*, Harper and Row Publishers: New York.