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Uduji, Joseph and Okolo-Obasi, Elda and Asongu, Simplice

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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; Phone: +2348037937393

Elda N. Okolo-Obasi
Institute for Development Studies, Enugu Campus,
University of Nigeria, Nsukka, Nigeria
E-mail: eldanduka@yahoo.com; ndukaelda@yahoo.com;
Phone: +2348063631111; +2349094501799

Simplice A. Asongu
African Governance and Development Institute,
P.O. Box 8413, Yaoundé, Cameroon
E-mails: asongusimplice@yahoo.com / asongus@afridev.org
Tel: +32473613172

Research Department

Oil Extraction in Nigeria's Ogoniland: the Role of Corporate Social Responsibility in Averting a Resurgence of Violence

Joseph I. Uduji, Elda N. Okolo-Obasi & Simplice A. Asongu

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Abstract

This paper contributes to the literature on the role of Corporate Social Responsibility (CSR) in oil extraction communities of developing countries. It specifically examines the impact of Global Memorandum of Understanding (GMoU) interventions of multinational oil companies (MOCs) on preventing a resurgence of violence in the Ogoniland of Nigeria. One thousand, two hundred respondent households were sampled across the six kingdoms of Ogoniland. Results from the use of a combined propensity score matching (PSM) and logit model show that GMoUs of MOCs generate significant reductions on key drivers of insurgence in Ogoniland. This suggests that taking on more Cluster Development Boards (CDBs) should form the basis for CSR practice in Ogoniland with the objective of equipping young people with entrepreneurship skills, creating employment, promoting environmental clean-up, and checking the return of violent conflicts. This in turn provides the enabling environment for businesses to thrive in the Nigeria's oil producing region.

Keywords: Oil extraction, Resurgence of violence, Corporate social responsibility, Propensity matching score, Logit model, Nigeria's Ogoniland.

1. Introduction

The event of extraction of oil in Ogoniland of Niger Delta in Nigeria is an elongated, intricate and often painful one, that to date has become apparently intractable in terms of its resolution and future course (UNEP, 2011). The happenings have become a development that has put individuals, politics and the oil industry at loggerheads resulting in a landscape denoted by a lack of trust, paralysis and blame, set against a deteriorating situation for the communities concerned (Watt, 2004). The real fact is that decades of dialogues, initiatives and demonstrations have in the long run failed to proffer a solution that meets the anticipations and responsibilities of all sides (Asgil, 2012). Oil exploration in Ogoniland began in the 1950s and wide-ranging production facilities were established within three decades of application. These tasks were handled by Shell Petroleum Development Company (Nigeria) Ltd (SPDC), a joint undertaking between the Nigerian National Petroleum Company (NNPC), Shell International, Elf and AGIP (NDDC, 2001). The Federal Government of Nigeria (FGN) is in joint-venture pacts with the multinational oil companies (MOCs) functional in the oil and gas sector in Nigeria. The FGN has possession of and controls the land with its natural properties in the subsoil. This is a main cause of conflict in Ogoniland. Land can be obtained by the government for important public purposes by virtue of the Land Use Act 1978. Later on, the Movement for Survival of Ogoni People (MOSOP) was established in 1990 and started agitating for more control over oil and gas resource on their land, for economic advancement, and autonomy over their affairs (including religious, cultural, and environmental matters). MOSOP's demands were abridged in their 1990 'Ogoni Bill of Rights', which were mainly of a civil nature and addressed to the Nigerian Government. By November 1992, MOSOP was also demanding US$6 billion in payments from past oil production and US$4 billion for supposed ecological damage, and MOCs were given 30 days to agree or leave Ogoniland (SPDC, 2018). MOCs discontinued production in Ogoniland and left from the area in 1993 after violence against their workers and action aimed at their amenities (Boele *et al,* 2001). The most visible unfriendly relationship developed between MOCs and the Ogoni community who were led by the activist Ken Saro-Wiwa. These acts of complaint took on a global character when the Nigerian government executed Ken Saro-Wiwa and eight other men who participated in leading protest by the Ogoni people against MOCs activities (NDDC, 2004). It is on the basis of this intensifying and often violent internal protest, growing international criticism of MOCs and the attendant reputational risk, that the MOCs swift adoption of corporate social responsibility (CSR) should be perceived (Marchant, 2014). MOCs have not produced oil or gas from Ogoni fields

since 1993, even though Ogoniland remains a transit route for pipelines conveying both MOCs and third-party oil production from the area. MOCs have overtly called for settlement among Ogonis, and between the Ogonis and MOCs. They have, in addition, sustained their community development ventures and programmes in the land in spite of the land no longer being an oil-generating area (Slack, 2012).In 2006, MOCs presented a new way of working with communities called the Global Memorandum of Understanding (GMoU). The GMoUs represent an essential move in CSR approach, emphasizing on clearer and accountable processes, and consistent communication with the grassroots, sustainability and conflict avoidance (SPDC, 2013).

At present, after several years of native people's campaigns against oil mining, some community leaders and other interested parties have begun to call for the restarting of oil production in Ogoniland (Linden & Palsson, 2013; Arisuokwu & Nnaomah, 2012). In 2015, a native oil firm, Belema Oil, was authorized by some Ogoni community leaders to start oil extraction from the Oil Mining Lease (OML II) which is one of the biggest onshore oil blocks in Nigeria, comprising of 33 oil and gas fields, but MOSOP and some civil society groups disallowed the authorization (Yakubu, 2017; Umar & Othman, 2017). In 2018, another native oil company Robo Michael, was authorized by some Ogoni traditional rulers, but the authorization generated fresh crisis in Ogoniland (Okeke-Ogbuafor, 2018). Community leaders, environmental activists and human right activists in Ogoniland have undertaken to repel the planned restarting of oil production in the area until the clean-up project recommended by the United Nations Environment Programme (UNEP) over environmental damage are fully implemented (Etemire & Muzan, 2017). Nevertheless, in March 2019, the FGN ordered the transferal of the operatorship of OML II from SPDC to the Nigerian Petroleum Development Company (NPDC) to recommence oil mining in the area; the announcement has heightened local tensions and amplified the risk of reintroduced violence in the area (PIND, 2019). Even with the embracing of GMoU model by MOCs as a new way of working with communities, scholars and civil activists have also contended that the oil-producing communities have received a quite low amount of gain related to the high social and ecological cost of extractive activities (Idemudia, 2014; Akpan, 2006; Edoho, 2008; Eweje, 2006; Frynas, 2009; Ekhator, 2014 and Tuodolo, 2009). On the other hand, Ite (2007), Lompo & Trani (2013), and Uduji& Okolo-Obasi (2017, 2018b, 2019a, 2020) all back CSR initiatives of MOCs. They argue that GMoUs is gradually making headway in the areas of local community initiatives in the region. Following the preceding differing perception of the

MOCs CSR initiatives, we hypothesize that the GMoUs have not significantly reduced the main drivers of disruptive conflict in Ogoniland. Hence, this paper adds to the extractive industries and society debate from the CSR perspective of MOCs in four areas of great interest in the literature.

- How has the MOCs GMoU intervened in Ogoniland of Niger Delta, Nigeria?
- Do MOCs sufficiently intervene in the key drivers of conflicts and violence in Ogoniland?
- To what extent has the GMoUs intervention of MOCs reduced the resurgence of conflict risk and violence in Ogoniland of Niger Delta, Nigeria?
- What are the implications of reducing the resurgence of conflict risk and violence in Ogoniland of Niger Delta, Nigeria?

The rest of the paper is structured as follows: Section 2, consideration of the background and theoretical underpinnings; Section 3, description of the materials and methods; Section 4, presentation of the results and corresponding discussion, and Section 5, conclusion with implications and future research directions.

2. Background and Theoretical Underpinnings

2.1 The Context of Ogoniland

The south-east of the Niger Delta basin contains Ogoniland, a region covering some 1,000 km^2(Figure 1). Its population is about 832, 000, comprising mainly of the Ogoni people (NPC, 2007). The region by administrative division has four local government areas: Eleme, Khana, Gokana, and Tai (NDDC, 2001). Traditionally, the land is formed by six kingdoms (Abbe, Ken-Khana, Nyo-Khana, Eleme, Gokana and Tai) having His Majesty King Godwin, N.K. Gininwa as the paramount ruler of the land. While in the view of the outside world, the communities of Ogoniland may appear related, they have special differences, including languages, traditional institutional structures and cultural features (NDDC, 2004). The people of Ogoniland are known for agricultural activities (farming and fishing), but decades of oil spillage and gas flaring, as well as the rate at which their population grows, has meant that such sources of livelihood are either no longer practicable or have been drastically reduced (Uduji & Okolo-Obasi, 2018a, 2019b). Ogoniland is in the central part of the OML II which contains 30 % of the oil block (UNEP, 2011). Although oil production activities in the area has been haulted for decades (since 1993), Ogoniland remains a movement route for a major pipeline that conveys crude oil from all parts of the Niger Delta. High density trunk-lines and

flow lines crisscross the oil block. OML II makes available considerable volume of gas to the Nigeria Liquefied Natural Gas (NLNG) company from Bonny field in the southern part of the block. The Afam VI gas-fired power plant run by MOCs is also supplied gas via the Afam field in the Northern part of OML II that links several oil fields and facilities from Ogoniland (UNEP, 2011). The environmental damage which is a concomitant to oil extraction, along with the rapport between MOCs and the Nigerian government and the lack of proceeds sharing, has prompted the Ogoniland protests being exacerbated and directed toward oil companies (PIND, 2015a, 2015b). The FGN sprung the Ogoni clean-up project in June 2016, based on the commendations of the UNEP Environmental Impact Assessment (EIA) report. Grievances over the execution of the clean-up project andlatest plan by the FGN to recommence oil extraction in Ogoniland have resulted in hightened tensions in the Area; and at the center of the evolving crisis is the OML II, an enormous oil block previously run by MOCs in Ogoniland (PIND, 2018, 2019; Uduji *et al,* 2020a, 2020b, 2020f, 2020g).

Figure 1. Ogoniland in Niger Delta, Nigeria

Source: NDDC, 2004

2.2 Drivers of conflict and violence in Ogoniland

In line with PIND (2019), the return of conflict risk and violence in Ogoniland can be situated within the context of numerous connected and usually overlapping conflict drivers and dynamics. The evolving conflict dynamics is compelled by wavering degrees of interrelated criminal, historical, communal, environmental and political factors (PIND, 2015a, 2015b, 2017, 2018,and 2019). First, communal protests over environmental pollution and negligence by the FGN and oil companies operating in the area have been a fundamental driver of conflict in Ogoniland (PIND, 2019; Asongu, 2020c, 2020d, 2020e). According to Yakubu (2017), the fight for economic and environmental justice initiated by MOSOP has grown into a culture of activism and confrontation in Ogoniland. The Ogonis are still deeply upset by the human rights abuses they underwent as a result of brutal tactics of the FGN in the 1990s (UNHCR, 2011). This persevering sense of grievances is evident in the refusal of exploration of oil in the area (Uduji *et al,* 2019b; Asongu *et al,* 2019a, 2019e). Figure 2 reveals reported incidents and mortalities in Ogoniland, Niger Delta.

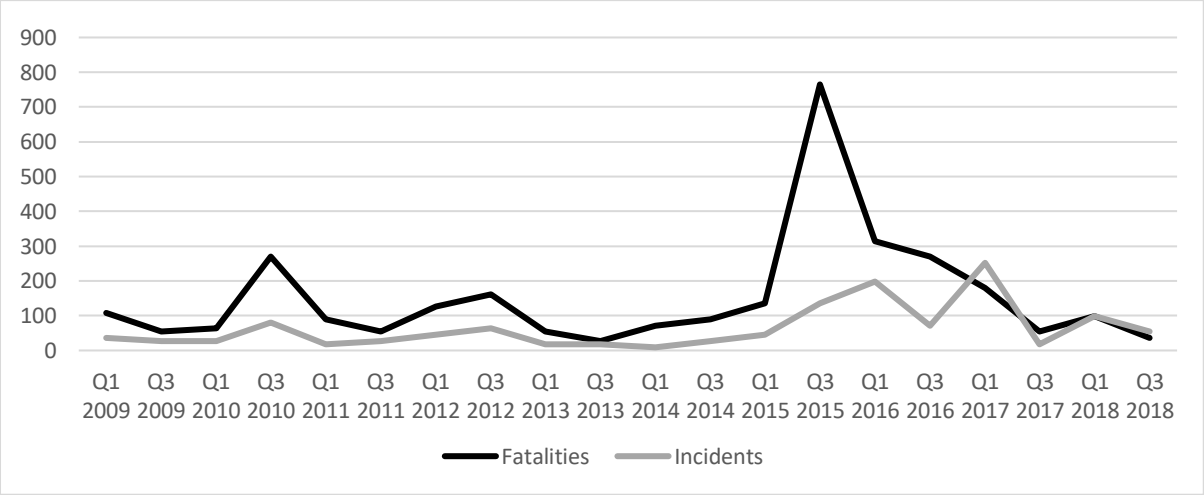


Figure 2. Reported incidents and fatalities in Ogoniland, Niger Delta
Source: PIND, 2019/ Authors' modification

Second, criminality is also a core driver of intense conflict in Ogoniland (Figure 3). According to PIND (2018), the degradation of the environment has led to the ruination of the main means of livelihoods of the people (such as farming and fishing), and this has pushed many of the useful adults to participate in criminal activities, including bunkering of oil and kidnapping for payment. Structured criminality has led to the increase of arms and the rise of a number of cult groups in Ogoniland (PIND, 2015b). Criminal and cult activities are financed with earnings from oil bunkering, locally known as *Kpofire*; oil bunkering is a significant driver of supremacy battles between opposing cult groups and criminal gangs, as

well as conflicts between gangs and public security forces (PIND, 2019; Uduji *et al,* 2018b, 2019g; Ajodo-Adebanjoko, 2017; Asongu, 2020a, 2020b).

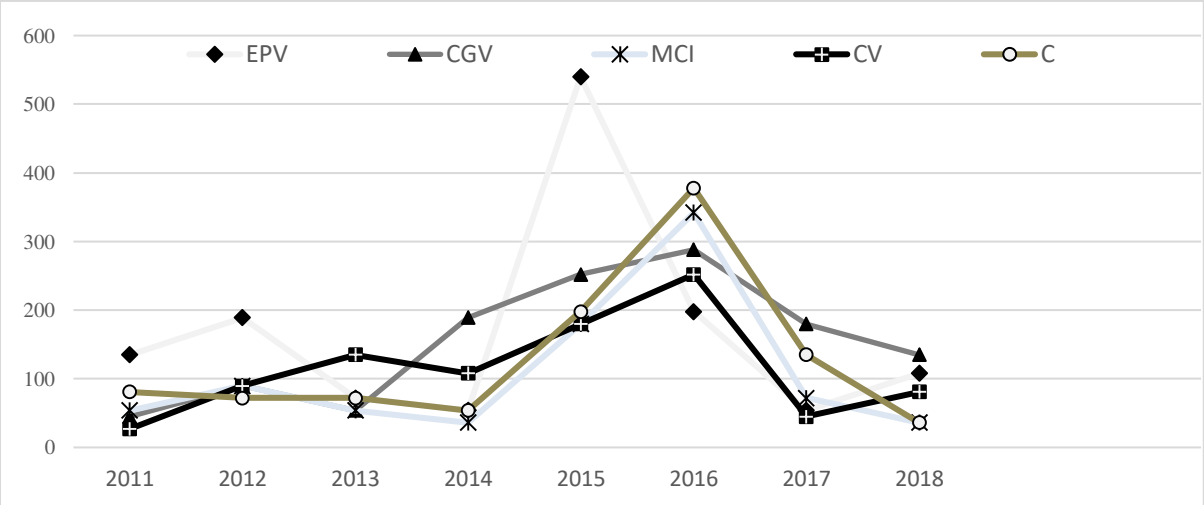


Figure 3. Conflict trend and dynamics in Ogoniland, Niger Delta
Source: PIND, 2019/ Authors' modification

EPV	Election/Political Violence
CGV	Cult/Gang Violence
MCI	Militancy/Counter – Insurgency
CV	Communal Violence
C	Criminality (including Piracy)

Third, politics is a core driver of criminal and cult violence in Ogoniland too (PIND, 2018). According to Chikwem & Duru (2018), criminality and cult violence are likely to step up during election cycles in Ogoniland. Many cult groups and organized criminal gangs hinge on the support of political elites, who either employ them as informal security or use them to attack and assassinate their opponents (Oluwaniyi, 2010; Uduji & Okolo-Obasi, 2019). Politically enthused violence is a driver of supremacy battles amid the many opposing cult groups, in an attempt to attract the support of the political elites (PIND, 2015). In March 2016, for example, over 40 people were purportedly murdered by political thugs during a re-run election in Tai Local Government Area (LGA); it is held that the resilient and better armed the gang group, the higher its likelihoods of being engaged by the political elites in Ogoniland (PIND, 2019; Uduji *et al* 2020c, 2020d). Figure 4 confirms the conflict drivers in Ogoniland, Niger Delta.

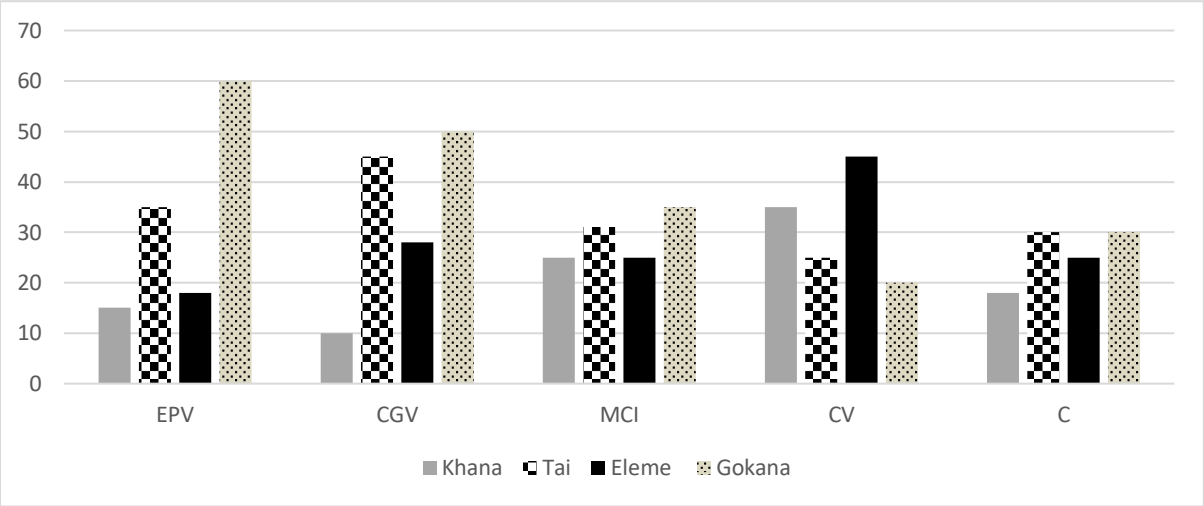


Figure 4. Conflict drivers in Ogoniland, Niger Delta

Source: PIND, 2019/ Authors' modification

EPV	Election/Political Violence
CGV	Cult/Gang Violence
MCI	Militancy/Counter – Insurgency
CV	Communal Violence
C	Criminality (including Piracy)

Fourth, the fight for influence and significance among community leaders is also a core driver of conflict at the community level in Ogoniland (PIND, 2019). According to Watts (2004), as a result of regular chieftaincy tussles and intra-communal clash in Ogoniland, community rulers and chiefs usually line up themselves with fortified groups to keep power; channeling money and arms into these groups and making them progressively destructive. A loss of political power by a community leader also causes violent clash, as some of these armed groups seek to fight back removal of their patron (Okeke-Ogbuafor, 2018). Moreover, splitting up or fusion of armed gangs, particularly when they are allied to traditional leaders or political elites, often worsens violent conflict (Arisu-Okwu & Nnaomah, 2012; Omotola, 2009). These conflict drivers are usually roused by trigger events such as community level divisions or state politics (Uduji *et al,* 2019c, 2019d; Asongu *et al,* 2019c, 2019d). Communal tension has been raised in Ogoniland since the FGN purportedly ordered the restarting of oil extraction in OML II. Community leaders and criminal gangs are reportedly planning and placing themselves in order ahead of the intended restarting of oil production in Ogoniland (PIND, 2019; Uduji *et al,* 2020e, 2020h; Ugwuanyi, 2020). Therefore, this paper

seeks to look at the role of MOCs GMoU in averting a return of violence in recommencement of oil extraction in OML II in Ogoniland of Niger Delta, Nigeria.

2.3 A new model of working with communities

MOCs have taken part in many of the CSR activities in Ogoniland and other areas of the Niger Delta. On yearly basis, they invest in social projects and programmes in communities mainly in the areas of business operation (Chevron, 2014). The primary investments were in agricultural development programmes in the early sixties and have grown over the years to include roads and civil infrastructure, healthcare, education, water projects and small businesses which are beneficial to the communities (Chevron, 2017). MOCs have tried to enhance on how they engage with local communities to carry out these projects; as a result, the GMoU was launched. The GMoUs were signed between groups of communities, MOCs and state government, creating a special public-private model to encourage economic and social stability. Through the GMoUs, the communities in the long run assumed responsibility for the usage of fund provided by the MOCs and for implementing the projects selected (Chevron, 2014). MOCs remain involved by participating in the review cum approval of projects with local communities and boards, and by providing annual project funding. This model substitutes the erstwhile approach whereby MOCs agreed to hundreds of separate development projects with distinct communities and managed them directly and independently (Alfred, 2013). Under the terms of the GMoUs, the communities agree on the development they want while MOCs make available secure funding for five years, ensuring that the communities have sure and reliable funding as they undertake the execution of their community development plans. The Cluster Development Boards (CDBs) work as the main supervisory and managerial organ, ensuring execution of projects and setting out strategies and programme. MOCs, by the end of 2012, had signed agreement with 33 GMoU clusters, covering 349 communities that make up about 35 % of the local communities near their business operations in the Niger Delta. A total of 723 projects were effectively completed through the GMoUs and the cumulative total funding for GMoU projects and programme as at 2012 was about US$117 million. As it were, nine of the 33 CDBs have grown to become registered foundations now receiving third party funding (SPDC, 2013). According to Uduji & Okolo-Obasi (2017, 2018c, 2018d, 2019), GMoUs are now very popular with communities, with greater ownership leading to better projects, sustainability and enhanced trust. It makes available a better organized community interface and grievance/dispute resolution mechanism and ensures high levels of transparency, financial accountability and

inclusiveness. Also, Uduji *et al* (2018b, 2019b, 2019c, 2019d, 2019g) agree that MOCs in Nigeria's Niger Delta add to the social and economic welfare of people in communities where they work as they have learnt through experience that their business is deeply related to society's progress. They work with the communities and partners to concentrate their assistance on strategic social investments in health, education and economic development. Though, this paper seeks to look at the impact of MOCs GMoUs interventions in reducing the return of conflict and violence in Ogoniland of Niger Delta region even as the FGN plan to resume oil mining in the area.

2.4 Theoretical perspective

The introduction of CSR has to a great extent been seen as a maneuver contrived by companies to swerve public censure of their manner, and a means for keeping away from government regulation (Jenkins, 2005; Doane, 2005). As a general notion, CSR has been severely censured, and there remain intense contention over its usefulness and practical implications (Frynas, 2005). While proponents view CSR as a vehicle for potentially reinvigorating an old dynamic in business-society relationships, critics sees it as a platform for new function to be demanded of old institutions (Idemudia, 2014). For instance, Friedman (1962) argued that CSR is a fundamentally subversive doctrine. In direct opposition, Eberstadt (1973), an early CSR advocate, asserted that the prevalent (CSR) movement is neither the preaching of self-appointed saviour nor the plotting of economic nihilism; rather, it is a historical swing aimed at recreating the social contract of power with responsibility. Similarly, Dalton and Cosier (1982) have suggested that the quest for social responsibility is not because of hostility towards the business community, but is rather in large measure the price for success that business have achieved. Carroll's (1991) CSR Pyramid is probably the most well-known model of CSR in recent times, with its four levels indicating the relative importance of economic, legal, ethical and philanthropic responsibilities. The model suggests that, although the components of the pyramid are not mutually exclusive, it would help managers to see that the different types of obligations are in a constant tension with one another.

However, critics suggest that most of the research on Carroll's CSR Pyramid has been in an American context, and culture may have an important influence on perceived CSR priorities (Burton *et al,* 2000). For example, Crane and Matten (2004) address this point explicitly by discussing CSR in a European context using Carroll's CSR Pyramid; and conclude that all

levels of CSR play a role in Europe, but they have different significance, and furthermore are interlinked in a somewhat different manner. Similarly, Visser (2006) challenged the accuracy and relevance of Carroll's Pyramid in African context; arguing that if Carroll's basic four-part model is accepted, it is suggested that the relative priorities of CSR in Africa are likely to be different from the classic, American ordering; as the CSR Pyramid may not be the best model for understanding CSR in general, and CSR in Africa in particular. Amaeshi *et al* (2006) have argued that the Nigerian conception of CSR is remarkably different from the Western version, and should be aimed towards addressing the peculiarity of the socio-economic development challenges of the country, and should be informed by socio-cultural influences. According to Uduji *et al* (2019a, 2019b, 2019c, 2020a, 2020b, 2020c) philanthropic initiatives as CSR by companies are prevalent in Nigeria. Frynas (2009) argued that the absence of government action in providing amenities for its citizens accentuates the role of multinationals in CSR and philanthropy, which is not regarded as CSR in Western countries. 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. Thus, this study adopts quantitative methodology but interprets the outcome from the African CSR perspective.

3. Materials and Methods

Academics such as Lompo and Trani (2014), Uduji and Okolo-Obasi (2017), Uduji *et al,* (2018b; 2019c) have put forward the needs for quantitative data on CSR of multinationals in Nigeria's Niger Delta region. Consequently, we embraced a quantitative methodology for this study. The population of the chosen communities was surveyed using the suitable research method in an effort to generate a cross-sectional data from a sample. The GMoUs considered in this study were GMoUs entered with the joint venture operated by the Shell Petroleum Development Company of Nigeria Limited. SPDC is the operator of the joint venture (the SPDC JV) between the government-owned Nigeria National Petroleum Corporation – NNPC (55% share), SPDC (30%), Total E&P Nigeria Limited (10%) and the Eni subsidiary Agip Oil Company Limited (5 %) (SPDC, 2013, 2018).

3.1 Sampling procedure

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 cluster development boards (CBDs) functions as the main supervisory and administrative organ, ensuring implementation of projects and setting out plans and programmes.

Therefore, for a community to participate in the GMoUs and enjoy the benefits, such community must be a member of a cluster development board (CDB). Unfortunately, not all the community leaders are satisfied with this new order of transparency and accountability brought about by the GMoU; as some communities are still agitating against the operation of MOCs in the land. Moreover, because of inter and intra community conflicts, some communities are not comfortable with the GMoUs ideology; hence, some communities choose not to merge with any other community and would not form a one-community CDB. It is on this basis that we selected communities that are participating and those not yet participating.

In the course of choosing respondent households, we went for a multi-staged sampling method. In the initial stage of the sampling, we made a list of the six kingdoms that make up Ogoniland (Ken-Khana, Nyo-Khana, Babbe, Gokana, Eleme and Tai), out of which we intentionally chose four communities each. These communities were picked on the basis that they are hosting at least a multinational oil company facility. Also the communities were selected on the basis of whether they belong to a CDB or not. Communities that belong to a CDB are called CDB communities while those that do not belong are referred to as non-CDB communities. Hence, 2 CDB and 2 non-CDB communities were selected from each kingdom. In the final stage, from the chosen communities, we hired the community gate keepers to randomly select 600 respondent households from the CDB communities and another 600 respondent households from the non-CDB communities. As a result, the total respondent selected and utilized for the study was 1200.

3.2 Data collection

Both primary and secondary data were collected for the work; however, the main source was the primary data. We made use of participatory research in generating the data particularly as it concerns the households in the host communities of the MOCs. The participatory technique

was opted for because it directly involves those being studied, and the management of their opinions is of significant influence (Uduji & Okolo-Obasi 2017, 2018a, 2018d). A structure questionnaire was administered to the chosen household in a form that represents a suitable tool to assess qualitative issues by quantitative information. The questionnaire was divided into three sections. Section one elicited information on the demographic and socio-economic characteristics of the respondents. Section two elicited information on the knowledge and participation in the GMoUs; while section three sought information on community development efforts in the communities (See attached questionnaires in appendix).Based on this questionnaire, scores were distributed according to the aims. The researchers directly administered the questionnaire with the aid of research assistants. Research assistants had to come in due to Ogoniland being multi lingual with not less than four main languages and dialects. Besides, Ogoni terrain is very rough and regularly violent which makes a local guide a need.

3.3 Analytical framework

This study concentrated on the usefulness and potentials of MOCs new CSR (GMoUs) in checkmating a likely resurgence of violence in extraction of oil in Ogoniland. We used descriptive statistics in achieving the first and second objectives; then, we combined inferential statistics of the use of propensity score matching (PSM) and logit model to achieve objective 3, which is to evaluate the impact of corporate social responsibilities of the multinationals using the GMoU on averting resurgence of violence in extraction of oil in Ogoniland. These methods were selected because of the need to control the problems of selectivity and endogeneity. In the application of the propensity score matching, the households selected from the CDB communities were seen as “treatment” group while the households picked from the non-CDB communities were seen as “control” group. This is to facilitate our estimation of an average treatment effect of CSR using propensity score matching approach. Odozi *et al,* (2010) disputed that PSM involves projecting the likelihood of treatment on the basis of the observed covariates for both the “treatment” and the “control” groups; it sums the pre-treatment characteristics of each subject into a single index variable and is then used to match comparable individuals. In propensity score matching, the model control group is picked from a larger survey and then matched to the treatment group on the basis of a set of observed characteristics on the estimate probability of treatment given observed characteristics, that is the propensity score (Ravallion 2001, Uduji et.al 2019g). In so doing, the observed characteristics are those used in picking individuals, but not affected

by the treatment. Therefore, we embraced this methodology for the above reason. This study is based on the supposition that the decision to be treated (that is, take part in the CDBs to receive CSR intervention), although not random, in the end relies on the variables observed. According to Rosenbaum and Rubin (1983), the ability to match on variable X means that one can match on probability of X. Hence, in estimating the impact of CSR in reducing the return of violence; two groups are identified. The groups are, those from the CDB communities as treatment group and is denoted as $R_i = 1$ for $Household_1$, and $R_i = 0$ otherwise (those from non-CDB communities, control group). The treatment groups are thus matched to the control group on the basis of the propensity score: (Probability of receiving CSR given observed characteristics).

Hence:

$P(X_1) = Prob(R_2 = 1/X_2)\ (0<P(X_2) < 1)$ Equation 1

Where X_1 is a vector of pre CSR control variables, if R_1's are independent over all 1 and the outcomes are independent of CSR given X_1, then outcomes are also independent of CSR given $P(X_1)$, just as they will do if CSR is received randomly. To draw an accurate conclusion about the impact of CSR activities on the subject matter (reducing the return of violence),we noted the necessary obligation to circumvent the selection bias on observables by matching on the probability of the treatment (covariates *X);* thus, we defined the PS of Vector X thus:

$P(X) = Pr\ (Z = 1/X),$ Equation 2

The Z represents the treatment indicator equating 1, if the chosen household has received CSR, and 0 otherwise. Because the PS is a balancing score, the observables *X* will be dispersed same for both "treatment" and "control" and the variances are seen as to the attribute of treatment. To get this unbiased impact estimates, we adapted the four steps related to Rosenbaum and Rubin (1983), Liebenehm, Affognon and Waibel (2011), Uduji et.al (2019g). To begin with, we acknowledged that the probability of receiving CSR is predicted by a binary response model, with suitable observable characteristics. Hence, we pooled two distinct groups: those who received CSR (treatment) and those who did not (Control). After these, we estimated the logit model of CSR receiving or not receiving as a result of some socio-economic characteristics variables. These variables include individual, household and community variables denoted in this equation as thus:

$P(x) = Pr(Z= 1/X) = F(\alpha_1 x_1 \ldots\ldots\ldots + \ldots . \alpha_n x_n) = F(x\alpha) = e^{x\alpha}$ Equation 3

We generated value of the probability of receiving CSR from the logit regression allocating each household a propensity score. The control groups with very low PS outside the range found for receiver were dropped at this point. For each household receiving CSR, a household not receiving CSR with the closest PS as measured by absolute difference in score known as nearest neighbour was obtained. We used the nearest five neighbours to make the estimate more severe. The mean values of the outcome of indicators for the nearest five neighbours were calculated and the difference between the mean and actual value for CSR receiving (treatment) is the evaluation of the gain due CSR. This difference between treatment and control groups is estimated by the average treatment effect on the treated (ATT). The true ATT, based on PSM is written thus:

$ATT_{PSM} = E_{p(x)} \{E(y_1/Z = 1, P(x) - E(y_0/Z = 0, P(X)\}$, Equation 4

EP(X) stands for expectation with respect to the distribution of PS in the population. The true ATT shows the mean difference in cutting down the surge of street kids. In this, we achieve a suitable match of a participant with her counterfactual in as much as their observable characteristics are identical. Three different matching techniques could be used in procurement of this matched pair; these methods which vary in terms of bias and efficiency are: nearest neighbor matching (NNM) radius matching (RM) and kernel-based matching (KM), a non-parametric matching estimator. Our third task was to check the matching estimators' quality by standardized differences in observables' means between receivers of CSR and non-receivers. Representing difference in percentage after matching with X for the covariate X, the difference in sample means for CDB communities as ($\acute{X}_1$) and matched non-CDB communities as ($\acute{X}_0$). In line with Rosenbaum and Rubin (1985), the sub-samples as a percentage of the square root of the average sample variance is put thus: $(\int_1^2 and \int_0^2 .)$.

Hence:

$$|SD = 100 * \frac{(\acute{x}1 - \acute{x}0)}{\left(.05 \int_1^2 and \int_0^2 .)1/2\right)}$$ Equation 5

We recognized a remaining bias below 5% after matching, even when there is no obvious threshold of effective or failed matching. This we took as a sign that the balance among the different observable characteristics between the matched groups is adequate. In general,

while considering the quasi-experimental design of the MOC's GMoU activity, there might be a likelihood that unobservable factors like household's intrinsic motivation and specific abilities or preferences, had influenced the decision to take part in CDBs or not. This problem of hidden bias was abutted by the bounding approach. In equation 3, we complemented the logit model to estimate propensity score by a vector *U* comprising of all unobservable variables and their effects on the probability of receiving CSR and captured by γ:

$P(x) = Pr(Z= 1/X) = F(X\alpha + U\gamma) = e^{X\alpha U\gamma}$ Equation 6

With sensitivity analysis, we looked at the strength of the influence of γ on receiving CSR in order to decrease the impact of receiving CSR on potential outcomes. Simply put, the postulation is that the unobservable variable is a binary variable taking values 1 or 0. Thus, the receiving probability of both household is applied in line with the bounds on the odds ratio as stated thus:

$$\frac{1}{e\gamma} \leq \frac{P(Xm)(1-P(Xn))}{P(Xn)(1-P(Xm))} \leq e\gamma$$ Equation 7

According to Rosenbaum (2002), both individual household have the same probability of receiving CSR, so long as they are identical in X, only if$e$□□□1

4. Results and Discussion

4.1 Descriptive analysis

We commenced the exploration of the household in the study with a description of some of their social (education), economic (occupation, household income) and demographic (age, marital status, household size) characteristics (Table 1). These characteristics are essential in understanding the differences in the socio-economic status of the CDB and Non-CDB households who receive direct CSR through the GMoUs in the lands of Ogoni. The analysis indicates that about 75% of the "treatment" groups are males, while 25% are females. Besides, about 535% of the "control" groups are males, while 47% are females. This reveals that male headed households are more likely to be facilitated through the CSR by the MOCs than female headed households. About 16% of the "treatment" groups are into paid employments, while the "control" has only 2%. Majority of the respondents both treatment and control group are involved in farming, which agreed with Uduji *et al* (2019c) in that any CSR intervention which is aimed at helping the farmers will yield positive result. The average age of the respondent in the treatment group is 31 years, while for the control group

it is 36 years. Also the analysis reveals that the "treatment" group earns more than the "control" group, as 48% of the "treatment" group earns more than 200,000 (550 USD), while only 17% of the "control" group could earn such amount. However, irrespective of receiving or not receiving the GMoU intervention, the average annual income of both the "treatment" and the "control" groups is in the low; the "treatment" group has an average income of NGN195, 000 000 (537 USD) in a year; while for the "control" group, the average income is NGN75, 000 (206 USD) in a year too. This discovery agrees with PIND (2019) in that about 70 percent of the Ogoniland population is impoverished, and the very oil wealth expected to bring development to the land in the contrary destroyed them; and the evidence pointing fingers at MOCs and FGN. Also Uduji and Okolo-Obasi (2019b) have similar view in that the Ogoni people have indeed paid a high cost for living in the oil rich Niger Delta with environmental degradation, conflicts and extreme poverty being part of their daily life.

Table 1. Socio-economic characteristics of the respondents

	Treatment Group CDB Household			**Control Group Non-CDB Household**		
Variables	**Freq**	**%**	**Cum**	**Freq**	**%**	**Cum**
Sex of Household Head						
Male	398	75	75	322	53	53
Females	202	25	100	278	47	100
	600	**100**		**600**	**100**	
Primary Occupation						
Fishing	105	18	17	128	21	21
Trading	114	19	36	106	18	39
Farming	162	27	64	321	54	92
Paid Employment	94	16	79	12	2	94
Handicraft	80	13	91	22	4	98
Others	45	8	100	11	2	100
	600	**100**		**600**	**100**	
Age of Respondents						
Less than 20 years	15	3	3	18	3	3
21 - 25 years	116	19	22	91	15	18
26 - 30 years	149	25	48	175	29	47
31 - 35 years	99	17	64	101	17	64
35 - 40 years	86	14	77	76	13	77
41 - 45 years	70	12	87	56	9	86
45 - 50 years	42	7	96	53	9	95
Above 50 years	23	4	100	30	5	100
	600	**100**		**600**	**100**	
Level of Education						
None	77	10	10	47	10	10

FSLC	223	40	50	193	31	41
WAEC/WASSCE	172	29	79	332	51	92
Degree and above	128	21	100	28	8	100
	600	100		**600**	100	
Marital Status						
Single	142	23	23	125	21	21
Married	278	51	74	435	73	93
Widow	83	12	86	13	2	96
Divorced/Separated	97	14	100	27	5	100
	600	100		**600**	100	
Household Size						
1-4 Person	228	41	41	302	50	50
5-9 Person	188	33	73	264	44	94
10-14 Person	122	19	93	22	4	98
15 Person and above	62	7	100	12	2	100
	600	100	200	**600**	100	
Annual Income						
1000 - 50,000	25	4	4	150	25	25
51,000 - 100,000	62	10	14	162	27	52
101,000 - 150,000	121	20	35	121	20	72
151,000 - 200,000	109	18	53	71	12	84
201,000 - 250,000	129	22	74	51	9	93
251,000 - 300,000	93	16	90	36	6	99
Above 300,000	61	10	100	9	2	100
	600	**100**		**600**	**100**	

Source: Authors' compilation based on household survey.

UNEP (2011) observed that since 2009, demoralizing oil spills have exposed thousands of fishermen and farmers in the oil-rich kingdom to toxic substances, weakening their health and destroying their farmlands and rivers; yet, the clean-up process is too slow.

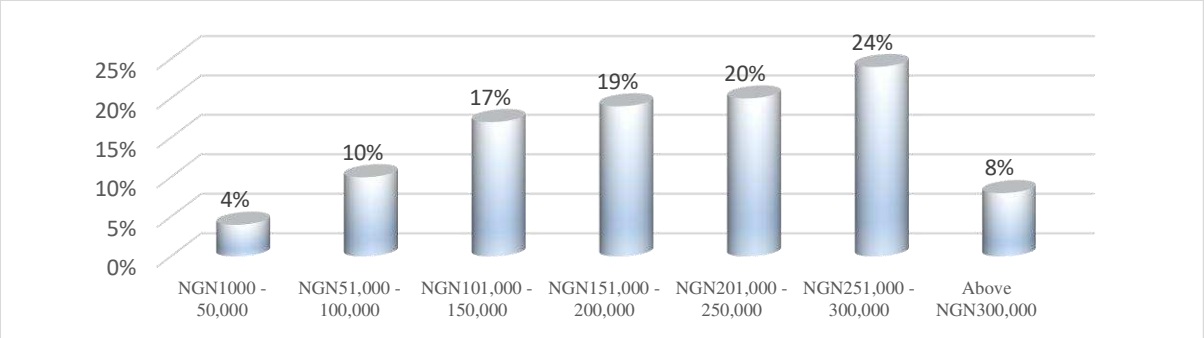


Figure 5. Average value of receipts from the GMoUs by respondents

Source: Authors' compilation based on household survey.

The analysis (Figure 5) reveals that in the CDB communities, about 4% have received between 1000 to 50,000 Nigerian naira (NGN) which is equal to (USD 3 to 139), while 10% percent have received between 51,000 to 100,000 NGN in the region of (USD 140 to 278). 84% (majority of the respondent household heads) have received between 101,000 to 300,000 NGN which is equal to (USD 283 to 834), only about 8% have received above 300,000 NGN equivalent of (USD 834 and above). This observation looks like SPDC (2018) in that GMoU funds have made available 80 university scholarship to young people from communities near their sites as a social investment. Socio-economic challenges in the Ogoniland may be said to have persisted, yet, GMoU provides optimism amid the hard realities of their daily lives.

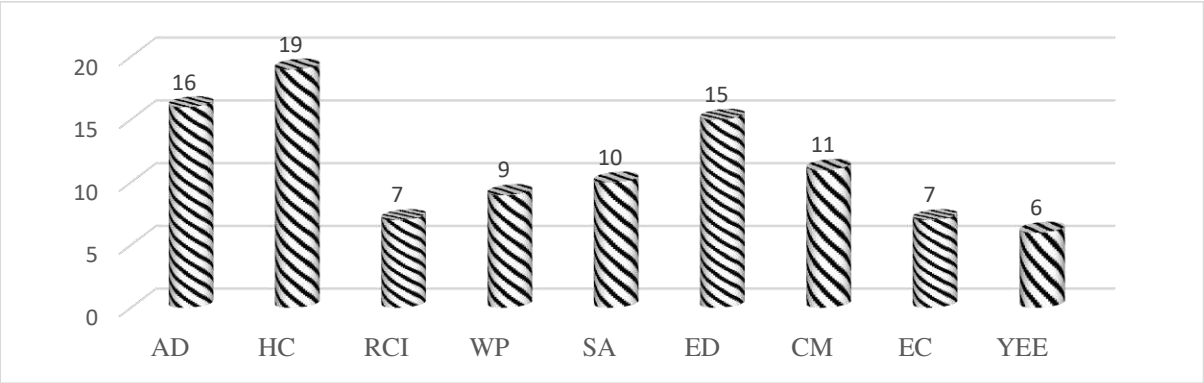
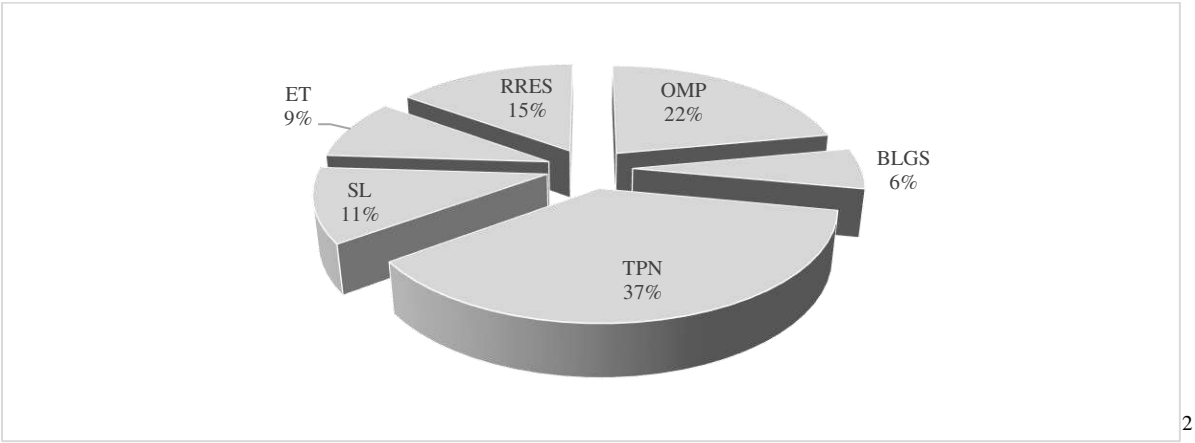


Figure 6. Percentage distribution of CSR intervention of MOCs by sectors in ogoniland[1].
Source: Author's compilation based on household survey.

Analysis (Figure 6) indicates that in the GMoU interventions of the MOCs in Ogoniland, healthcare services is at the peak of the chart, taking 19% of the intervention; while agricultural development is next with 16% and educational development follows with 15%. At the bottom of the chart is Youth employment and entrepreneurship development accounting which accounts for 6%. Environmental cleaning accounts for 7%; road and civil infrastructural also accounts for 7%; skill acquisition is 10%; water project 9%, and chieftaincy matters, as the last but not the least, accounts for 11%. Unfortunately, the major issues that drive insurgency (youth unemployment and environmental degradation) have both received less attention. MOCs, regrettably, waste a whole lot of resources on chieftaincy matter for settling traditional leaders who would eventually line up with the militant youths in engaging in sabotage of MOCs equipment in order to extract more concessions and

[1]EC = Environmental cleaning, YEE = Youth employment and entrepreneurship, RCI= Roads and civil infrastructure, WP =Water projects, SA= Skill acquisition, ED = Educational development, CM = Chieftaincy matters, EC = Environmental cleaning, YEE = Youth employment and entrepreneurship

compensation for their communities. This discovery arrives at a settlement with Uduji *et al* (2019h) in that lack of attention to the environmental wreck which has accompanied oil mining along with lack of employment for youths have led to these grievances directed at MOCs and FGN in Ogoniland.



[2]

Figure 7. Percentage distribution of CSR intervention in capacity building by the MOCs in ogoni land.
Source: Uduji et.al (2019g)/Author's modification based on household survey.

Analysis (Figure 7) reveals that majority of the respondent household head both from the CDB and non-CDB communities are of the opinion that the GMoU interventions of the MOCs are concentrated on areas that will directly and/or remotely benefit the MOCs. For instance, out of the total capacity building programmes carried out by the MOCs using GMOU, 37% is for training on peaceful negotiation; while 22% is for operation and maintenance of oil companies' power plants. Only 6% of the capacity building intervention was used for grant and soft loan for businesses; 9% went into entrepreneurship development; while 11% was used for street lighting. The rest (15%)was used for construction of rural roads leading to exploration sites. This shows that the MOCs are just rubbing the main issue that have led to insurgence and capable of leading to resurgence. Scholars such as Yakubu (2017), Uduji and Okolo-Obasi (2019a, 2019b) and others have agreed in that Nigerian federal government could utilize the oil spills clean-up programme officially launched in June 2016. Environmental activists see it as a chance to drive development among Ogoni communities distressed by contamination from oil spills and tackle, in particular, the disturbing rate of youth unemployment in the region. If this opportunity is grabbed, the

[2]OMP = Operation and Maintenance of plants, BLGS = Business Loan/GrantTPN = Training on Peaceful Negotiation,SL = Street Light and ET = Entrepreneurship training Lighting,RRES = Rural Roads to Exploration Sites

UNEP (2011) recommended programme could kick start a workable and green development of Ogoniland.

4.2 Econometric analysis

Analysis (Table 2) summed the average differences in the basic scores and independent observable characteristics between CDB communities and non-CDB communities. Generally, the variance in means reveals that the scores on reduction in criminality and cult violence (21.56 for CDB communities and 45.87 for non-CDB communities), reduction in communal grievances (26.28 for CDB communities and 49.09 for non-CDB communities), enhanced political involvement (25.43 for CDB communities and 42.34 for non-CDB communities), reduction in environmental pollution (24.56 for CDB communities and 33.44 for non-CDB communities), and improved means of livelihoods (29.67for CDB communities and 52.34 for non-CDB communities)are reasonably low for the CDB communities, but relatively high for the non-CDB communities. The differences are, -24.31%; -22.81%, -16.91%, - 8.88%, and -22.67% respectively. Also looking at the chosen observable characteristics, we noted that there are significant positive differences in Age (4.86%), Marital Status (0.81%), Primary Occupation (6.45%), Sex (3.21%), Education (18.32%), and Annual Income (28.21%). Only Income of other Household Members (-0.93) and Household Size (-6.13) have negative difference. On the chosen household characteristics, Access to Shelter has significant positive difference of (16.56), Access to medical care (5.34), Access to portable water (2.31) and Freedom of participation in socio-economic activities (2.65). Only Access to land is negatively different with (-0.17).

The effect of this discovery is that as the CDB communities (treatment group) has shown reduction in almost all the indices we measured, there is every possibility that GMoU interventions that are geared toward impacting the variables mentioned above can be catalysts towards reducing insurgency in the communities of Ogoni land. Hence, observable participation incentives can be identified, which emphasizes the possibility that selective placement exists and so the need to apply propensity score matching.

Table 2. Comparison of mean score and observable characteristics across participants and non-participants (N = 1200)

Score in Percentage of maximum score	CDB	Non CDB	Difference
Score on Reduction in criminality and cult violence	21.56	45.87	-24.31**
Score on Reduction in communal grievances	26.28	49.09	-22.81**
Score on Enhanced political participation	25.43	42.34	-16.91**
Score on Reduction in environmental pollution	24.56	33.44	-8.88**
Score on Enhanced means of livelihoods	29.67	52.34	-22.67**
Socio-Economic Characteristics			
Age	23.21	18.35	4.86
Sex	31.45	28.24	3.21
Education	44.21	25.89	18.32
Marital Status	32.24	31.43	0.81**
Household Size	11.76	18.21	-6.45
Primary Occupation	23.56	17.43	6.13*
Annual Income	62.54	34.33	28.21
Income of Other Household Members	13.18	14.11	-0.93
Household Characteristics			
Access to Shelter	28.71	12.15	16.56**
Access to portable water	23.43	21.12	2.31**
Access to medical care	21.19	15.85	5.34*
Freedom of participation in socio-economic activities	22.19	19.54	2.65***
Access to land	16.28	16.45	-0.17*
Observation	**500**	**700**	

Source: Authors' compilation based on household survey

In line with our model above, the chosen characteristics that capture pertinent observable differences of both the CDB communities and non-CDB communities were tracked to control and forecast the probability of receiving CSR through the GMoU. Applying the Logit model in equation 3, Table 3 reveals the estimated coefficients and the odd ratio expressed in terms of odds of Z=1, with the marginal effect and standard error. In a single observation, the evidence is that sex of the household head, highest educational level, primary occupation, view of the GMoU, management system of the CDB leaders, and evidence of gains of participants are factors that positively impact on the household head seeking and receiving direct CSR in the GMoU programmes. On the other side, age of the household head, what the household head makes annually and the income of other household member impacts on it negatively.

Table 3. Logit model to predict the probability of receiving CSR conditional on selected observables

Variables[3]	Coefficient	Odd Ratio	Marginal Effect	Std. Error
Age	.-013	.133	.0011	.031
Sex	.042	.531	.001*	.042
PriOcc	.521	.532	.0210*	.214
Edu	.178	.432	.051**	.019
AY	.-014	.721	.018	.012
MgtCDB	.001	.238	.101	.0016
MS	.043	1.231	.0103	.213
HHcom	-.221	.412	.022	.042
BenPart	.891	1.541	.0112**	.021
Perception of GMoU	1.231	7.318	.112*	.021
Constant	6.343	2.281	.00417	.726
Observation	1200			
Likelihood Ratio - LR test (ρ=0)		□□2 (1) =1482.318*		
Pseudo R^2	0.29			

*= significant at 1% level; ** = significant at 5% level; and * * * = significant at 10% level

Source: Authors' compilation based on household survey.

To get objective three of this study achieved, and in line with the probability of receiving CSR predicted in the model, we estimated the impact of the GMoU on cutting the return of conflict risk and violence in Ogoniland by the average treatment test (ATT), as outlined in equation 4. The observations we carefully certified are ordered arbitrarily. There are no large disparities in the allocation of propensity scores. Hence we noted that the NNM (nearest neighbour matching) yields the highest and most significant treatment effect estimate in the following five outcome categories: reduction in criminality and cult violence, reduction in communal protests, enhanced political participation, reduction in environmental pollution and enhanced means of livelihood.

[3]Age = age of respondent, Sex = sex of respondent (Male =1 female 0), PriOcc = primary occupation of respondent, Edu = Highest level of education of respondent, AY = Income of the respondent, MgtCDB = management system of the CDB leaders, MS = Marital status of respondent, BenPart = evidence of benefit of participants and HHcom = income of other household members

Table 4. Estimated impacts of CSR activities using the MOCs' GMoU (CG) on women via different matching algorithms

	Access and Knowledge Score in Percentage of Maximum Score		**Average Treatment effect on the treated**
	Receivers	Non- Receivers	
Nearest neighbour matching	Using single nearest or closest neighbour		
Score on Reduction in criminality and cult violence	21.56	45.87	-24.31**
Score on Reduction in communal grievances	26.28	49.09	-22.81**
Score on Enhanced political participation	25.43	42.34	-16.91**
Score on Reduction in environmental pollution	24.56	33.44	-8.88**
Score on Enhanced means of livelihoods	29.67	52.34	-22.67**
Observations	**450**	**450**	
Radius matching	Using all neighbours within a caliper of 0.01		
Score on Reduction in criminality and cult violence	23.87	45.23	-21.36**
Score on Reduction in communal grievances	20.18	44.01	-23.83**
Score on Enhanced political participation	26.76	46.43	-19.67**
Score on Reduction in environmental pollution	23.56	29.89	-6.33**
Score on Enhanced means of livelihoods	36.64	57.62	-20.98**
Observations	**456**	**651**	
Kernel-based matching	Using a bi-weight kernel function and a smoothing parameter of 0.06		
Score on Reduction in criminality and cult violence	18.41	28.31	-9.9**
Score on Reduction in communal grievances	27.87	42.65	-14.78**
Score on Enhanced political participation	23.23	43.24	-20.01**
Score on Reduction in environmental pollution	18.51	13.45	5.06**
Score on Enhanced means of livelihoods	34.56	44.32	-9.76**
	500	694	

*= significant at 1% level; ** = significant at 5% level; and * * * = significant at 10% level

Source: Authors' compilation based on household survey.

Analysis (Table 4) indicates that the nearest neighbour estimate of enhancement of livelihood of respondents as a result of receiving CSR using the GMOU is approximately -23%; nevertheless, believing that the NNM method yields relatively poor matches as a result of the inadequacy of information, we moved on to the other two matching method (Radius and Kernel-based matching). The estimated impact using radius matching algorithm is about -20%; while Kernel-based matching algorithm produces average treatment effect on the treated of -10%. Thus, it can be established that CSR generate significant gains in household comfort, hence, the tension of insecurity that leads to insurgence can be reduced, and the other four variables show significant reductions. These, if invigorated and made better will lift many out of poverty line, give people political voices, and better environmental

cleanliness which is at the root of many insurgent activities. This finding upholds Uduji *et al* (2019b, 2019c 2019d) in that MOCs have been able to reach nearly 224 communities in Ogoniland since it carried out a campaign in 2014 to promote awareness on the environmental wreckage from pipeline vandalism and illegal crude oil refining as a response to the recommendation of the UNEP Report on Ogoniland. The programme made use of open-air meetings and publicity campaigns which were on electronic media to appeal to the gangs partaking in crude oil theft in Ogoniland and other parts of Niger Delta to halt the destruction of their land and heritage through pipeline vandalism.

Table 5. Imbalance test results of observable covariates for three different matching algorithms via standardized difference in percent

Covariates *X*	**Standardized differences in % after**		
	Nearest neighbour matching	**Radius matching**	**Kernel-based matching**
Age	3.9	18.2	14.2
Sex	3.7	17.4	26.6
PriOcc	8.8	22.6	19.4
Edu	4.2	16.4	13.3
AY	2.1	12.1	13.1
MgtCDB	3.1	16.5	14.5
MS	3.6	32.1	9.4
HHcom	3.8	18.6	14.8
BenPart	2.7	37.8	12.6
Perception of GMoU	5.1	65.7	15.6
Constant	5.6	48.4	24.7
Mean absolute standardized difference	4.2	27.8	16.2
Median absolute standardized difference	3.1	16.5	14.5

Source: Authors' compilation based on household survey

We examined the imbalance of single observable characteristics and it reveals that the quality of the simple method of selecting the only closest neighbour in line with the propensity score NNM is much higher than the KM and RM in matching. In table 5, the overall balance of all covariates between treatment group and control confirms the higher quality of nearest neighbor matching. For the kernel-based matching and radius, both the mean and the median of the absolute standardized difference after matching are far above the threshold of 5%, while the nearest neighbor matching is reasonably below.

Table 6. Sensitivity analysis with Rosenbaum's bounds on probability values

	Upper bounds on the significance level for different values of e^y				
	$e^y = 1$	$e^y = 1.25$	$e^y = 1.5$	$e^y = 1.75$	$e^y = 2$
Nearest neighbor matching	Using single nearest or closest neighbor				
Score on Reduction in criminality and cult violence	0.0001	0.0051	0.0012	0.302	0.243
Score on Reduction in communal grievances	0.0001	0.0031	0.0231	0.321	0.241
Score on Enhanced political participation	0.0001	0.0031	0.0014	0.021	0.032
Score on Reduction in environmental pollution	0.0001	0.0012	0.0013	0.0522	0.143
Score on Enhanced means of livelihoods	0.0001	0.0020	0.0442	0.421	0.812
Radius matching	Using all neighbors within a caliper of 0.01				
Score on Reduction in criminality and cult violence	0.0001	0.0042	0.0019	0.081	0.0643
Score on Reduction in communal grievances	0.0002	0.0033	0.0020	0.142	0.061
Score on Enhanced political participation	0.0004	0.0241	0.1461	0.628	0.072
Score on Reduction in environmental pollution	0.0001	0.0021	0.0041	0.012	0.0732
Score on Enhanced means of livelihoods	0.0001	0.0021	0.0321	0.020	0.0322
Kernel-based matching	Using a bi-weight kernel function and a smoothing parameter of 0.06				
Score on Reduction in criminality and cult violence	0.0001	0.00145	0.0018	0.011	0.0124
Score on Reduction in communal grievances	0.0001	0.00217	0.0021	0.015	0.0327
Score on Enhanced political participation	0.0001	0.0132	0.126	0.582	0.034
Score on Reduction in environmental pollution	0.0001	0.0171	0.0241	0.193	0.017
Score on Enhanced means of livelihoods	0.0001	0.00172	0.0021	0.021	0.0271

Source: Computed from the field data by authors

Analysis (Table 6) indicated that there is a more generated robust treatment effect in KM than in NNM and RM with regard to estimates to hidden bias, reduction in criminality and cult violence, reduction in communal grievances, reduction in environmental pollution and enhanced means of livelihoods. Therefore, we have a probability that matched pairs may vary by up to 100% in unobservable characteristics, while the impact of CSR on reduction in criminality and cult violence, reduction in communal grievances, reduction in environmental pollution, enhanced means of livelihoods and enhanced political participation, would still be significant at a level of 5% (*p*-value = 0.0124, *p*-value = 0.0327, p-value = 0.017, *p*-value 0.034, and *p*-value 0.0271 respectively). Same categories of knowledge score are robust to hidden bias up to an influence of $e^y = 2$at a significance level of 10% following the radius matching approach. This finding proposes that MOCs through GMoU interventions are making some efforts for alternative livelihood programmes to put off a perceived resurgence of violence in oil extraction in Ogoniland. It conceded with SPDC (2018) report in that Shell's flagship youth entrepreneurship programme, Shell LIVEWIRE, was stretched to Ogoniland in 2014 with the purpose of raising living standards, reducing crude oil theft and averting a resurgence of violence through the CSR promotion of alternative livelihood. One

hundred and five (105) beneficiaries graduated in February 2015, and more than 70 percent of them now are flourishing business owners and employers of labour. Sixty (60) Ogoni youths were trained in entrepreneurship skills in 2016, the fifty of them who thrived in the final assessment got start-up funds for their business ideas. In 2017, eighty Ogoni youths took part in the training after which each pitched their business idea to an expert panel of judges. Sixty (60) top performing participants were selected to receive start-up funding totaling more than $65, 000 (₦ 19.69 million) to help turnactualize their business ideas. Then, in 2018, 100 youths from Ogoni communities near the Trans-Nigeria Pipeline took part in training with 80 top performing trainees receiving business start-up funding totaling more than $90, 000 (₦ 27.27 million).

In sum, our findings provide a sustainable linkage between reduction in drivers of conflicts and GMoUs in averting a resurgence of violence in Ogoniland. Most critically it is proposed that the relative priorities of CSR of MOCs in Nigeria should be different from the classic Western version; but in line with Visser (2006) and Amaeshi *et al* (2006) in considering the significance of socio-cultural context of Africans specifically. Nevertheless, in extension and contribution, we reason that if MOCs are to work towards checking a resurgence of violence in Ogoniland, equipping young people with skills to start-up their own business, creating employment and making available access to crucial business knowledge and customized support they need to transform their enterprising ideas into practicable and sustainable businesses should be allotted the highest CSR priority. It is our contention that MOCs are central in deterring the drivers of conflicts and violence in Ogoniland by improving alternative livelihood programmes, raising living standards, and cutting down criminalities. Hence, taking on GMoUs interventions, specifically aimed at the key drivers of conflicts and violence should form the foundation of CSR practices in Ogoniland, which in turn will provide the enabling environment for the extraction of oil in Nigeria.

5. Concluding Remarks, Caveats, and Future Research Directions

The event of extraction of oil in the Ogoniland of Nigeria is complex and has become intractable in relation to its resolution and future direction. Hence, we set out to examine the impact of GMoUs of MOCs interventions on checking a resurgence of violence conflicts in Ogoniland. A total of one thousand, two hundred respondent households were sampled across the six kingdoms of Ogoniland. Results from the use of a combined PSM and logit model show that GMoUs of MOCs cause significant decrease to key drivers of insurgence in

Ogoniland. This suggests that taking on more Cluster Development Boards (CDBs) should form the foundation of CSR practices in Ogoniland; with the objective of equipping young people with entrepreneurship skills, promoting environmental clean-up, creating employment, and reducing return of violent conflicts; which in turn will provide the enabling environment for extensive responsible businesses in the region.

This study has shown that households under the CDB communities have benefited much from the GMoUs as a new model of administering the CSR of the multinationals. This model as shown by the CDB communities has made CSR to reach the targeted common man in the rural community and has caused communities participating to own their development effort and administer it as they chose. Hence the communities that are not part of the CDBs are definitely missing a lot as resources allocated to them may still be hijacked by some community and traditional leaders. On both the companies and the communities, participating in the GMoUs has a major advantage of making the effort of the companies to reach the targeted group. This in-turn reduces aggressiveness of the rural youth and helps to reduce the tendency to be violent; suggesting that violence is reduced in the CDB communities compared to the non-CDB communities.

On the implications for research, although this study shows that CSR plays a pivotal role in reducing a resurgence of violent conflict in Ogoniland, it is necessary to extend this research in determining whether CSR can be a substitute for MOCs taxations, especially in sub-Saharan African countries. Nevertheless, the study is very much limited to the scope of Ogoniland in Nigeria. Therefore, the discoveries cannot be generalized to other African countries with the same policy challenges. In the light of this shortcoming, reproducing the analysis in other countries will worth the effort since it will examine whether the established nexuses withstand pragmatic scrutiny in dissimilar oil producing community context of Africa. Another caveat of the study is that the GMoUs considered by the authors were GMoUs entered with a joint venture operated by SPDC, and did not involve other joint ventures in the region. Hence, the findings do not indicate noticeable differences between the GMoUs entered with one joint venture and those entered with another joint venture. For this reason, replicating the analysis that involve other joint ventures would be most important in determining detectable divergences from the GMoUs entered with one joint venture and those entered with another joint venture.

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Appendix 1 Part of the Questionnaires used in the Larger Niger Delta Studies

DRAFT QUESTIONNAIRE FOR RURAL HOUSEHOLDS IN HOST COMMUNITIES OF NIGER DELTA

State _____ LGA _____

City/Town_____

Name of Respondent:_____

1. Sex of Respondent :
   Male [ ] Female [ ]
2. Age Bracket:
   a) Between 20 – 30 [ ] b) Between 31 – 40 [ ] c) Between 41 – 50 [ ]
   d) Between 51 - 60 [ ] e) Above 60 [ ]
3. Marital Status:
   a) Married [ ] b) Single [ ] c) Separated [ ] d) Widowed [ ] e) Divorced [ ]
4. Number living in household at present (Household Size): _____
5. Highest Educational Qualification of Respondent:
   a) None [ ] b) Primary [ ] c) Secondary [ ] d) Tertiary [ ]
6. Religion of the Respondent
   a) Christianity [ ] b) Islam [ ] c) Traditional d) others [ ]
7. Employment status of Respondent
   a) Government/Private Paid Employment [ ] b) Farming [ ] c) Trading [ ] d) Handicraft [ ]
   e) Unemployed [ ] g) Others [ ] Pls Specify_____
8. What is the employment status of your spouse (if you are married)
   a) Government/Private Paid Employment [ ] b) Farming [ ] c) Trading [ ] d) Handicraft [ ]
   e) Unemployed [ ] g) Others [ ] Pls Specify _____
9. How long have you been in this occupation:
   a) 0- 10 Years [ ] b) 11- 20 Years[ ] c) 21 - 30Years [ ] d) 31 - 40 Years [ ] e) Above 40 Years [ ]
10. What is your range of monthly income from the business
    a) (0- 50,000) [ ] b) (51,000 – 100,000) [ ] c) (101,000 – 150,000) [ ] d) (151,000-200,000) [ ]
    e) (201,000 – 250,000) [ ] f) (251,000 – 300,000) [ ] g) (301,000- 350,000) [ ] h) 351,000-400,000 [ ] i) Above 400,000) [ ]
11. In this your occupation, have you received any form of support from any of the oil companies
    a) Yes [ ] b) No [ ]
12. If yes, what is the nature of the support
    a) Infrastructural development [ ] b) Soft/grant Loan [ ] c) Training [ ] d) others _____

13. Has any of your family members received and CSR intervention of the MOCs under GMoU.

    a) Yes [ ] b) No [ ]

14. If yes to 13 above in which of these areas (tick as many as applied)

Loan	
Grant	
Input subsidy	
Scholarship	
Bursary award	
Skill acquisition training	
Construction of house	
Others specify ----------	

15. If yes to 13 above, kindly quantify the receipt in monetary terms along this range

    a) (0- 50,000) [ ] b) (51,000 – 100,000) [ ] c) (101,000 – 150,000) [ ] d) (151,000-200,000) [ ]

    e) (201,000 – 250,000) [ ] f) (251,000 – 300,000) [ ] g) (301,000- 350,000) [ ] h) 351,000-400,000 [ ] i) Above 400,000) [ ]

16. Are you aware of the GMoUs of the Multi-national oil companies?

    a) Yes [ ] b) No [ ]

17. If yes, from 1- 11 (1 the most important) rate the activities of the MOCs in the following area

Activities	**Rate 1 - 11**
Housing and Roads	
Health Services	
Education	
Fishing	
Agriculture and rural Farming	
Skill Acquisition	
Rural Electrification	
Policy Advocacy	
Eco Cultural tourism	
Chieftaincy Matter	
Direct Youth Employment	

18. How and where do you get the Household drinking water?

    a) Tap [ ] b) Stream [ ] c) River [ ] c) Borehole [ ] d) Hand dug Well [ ] e) Rain Water [ ]

Other (pls specify)_____

19. When a member of the Household is sick, how is (s)he treated?

a) By a qualified doctor in a hospital [ ] b) We buy drugs in a drugstore (chemist) [ ]

c) We see a traditional medical expert [ ] d) We treat him/her ourselves [ ] e) We just pray [ ]

f) We do nothing [ ] g) We take other actions (pls specify)_____

20. Educational qualifications of members of the household?

Level of schooling	No in Household
No schooling	
Primary education	
Junior secondary education	
Senior secondary education	
College of Education/Polytechnic	
First Degree (University)	
Postgraduate Qualifications (PGD, MSc, PhD, etc)	
Other (Special, Islamic, etc) Education	

21 Do you have any project(s) in education (School Building, Library, Scholarship etc?) in your community sponsored under any GMoU?

a) Yes [ ] b) No [ ]

22 If yes, how has it affected the development of education in your community?

a) It has provided more opportunities to the less privileged [ ]

b) it has widened the inequality gap [ ]

c) it has increased the level of literacy in the community[ ]

d) it has not made any impact [ ]

23 Do you have any water project(s) (Boreholes, Taps etc) sponsored under GMoU in your community?

a) Yes [ ] b) No [ ]

23 If yes, how has it affected the development in your community?

a) It has provided more access to clean water [ ]

b) it has reduced the incidence of water born diseases [ ]

c) it has increased labour man-hour by reducing the amount time spent going to stream [ ]

d) it enhances the breeding of mosquitoes [ ]

e) it has not made any impact [ ]

24 Do you have any project(s) in Traditional cultural tourism (Handicraft development etc) in your community sponsored under any GMoU?

a) Yes [ ] b) No [ ]

25 If yes, how has it affected the development of cultural tourism in your community?

a) It has provided more opportunities to the less privileged [ ]

b) It has widened the inequality gap [ ]

c) It has increased the level of illiteracy in the community [ ]

d) It has not made any impact [ ]

26 Do you have any health project(s) (hospitals, maternities, etc) sponsored under GMoU in your Community?

27 If yes, how has it affected health development in your community?

a) It has provided more access to health care [ ]

b) it has reduced the incidence of untimely death especially mothers and children [ ]

c) it has increased labour man-hour and productivity [ ]

d) it has not made any impact [ ]

Others specify _____

28 Do you have any youth empowerment project(s) sponsored under GMoU in your Community?

29 If yes, how has it affected youth restiveness in your community?

a) It has provided more meaningful engagements for the youth [ ]

b) it has changed the mentality of most of the youths [ ]

c) it has reduced crime and violence among the youth [ ]

d) it has increased inequalities in the community [ ]

d) it has not made any impact [ ]

Others specify _____

30 In percentage, rate these major oil companies according to their investments in the following areas.

Multinational oil firms	**Total E&P**	**ExxonMobil**	**Chevron**	**Shell**	**Agip**	**Halliburton**
Housing and Roads						
Health Services						
Education						
Fishing						
Agriculture /rural Farming						
Skill Acquisition						
Rural Electrification						
Policy Advocacy						
Eco Cultural tourism						
Chieftaincy Matter						

Direct Youth Employment						

31 Name any other project sponsored under GMOUs in your community

_____
_____
_____
_____
_____

32 At what state is each of the projects?

Project	Completed and in use	Completed but not yet in use	Nearly Completion	Just Started	Just Proposed
Housing and Roads					
Health Services					
Education					
Fishing					
Agriculture/rural Farming					
Skill Acquisition					
Rural Electrification					
Policy Advocacy					
Eco Cultural tourism					
Chieftaincy Matter					
Direct Youth Employment					

33 In your opinion, what is the impact of such project on development of your community?

_____
_____
_____
_____

34 In your view, what do you think the impact of GMoU overall is with respect to violence control?

a) Positive [ ] b) Negative not sure [ ]

35 If Positive, in what ways do you think it help?

a) It provides job for unemployed youth [ ]

b) It reduces the rate of crime [ ]

c) It is major source of income for families and communities [ ]

d) It make for positive output in the families [ ]

Others (please specify_____

36 If you have opportunity to lead your community, and your community is not in any CDB, how will you react to joining a CDBs

a) I will take it with both hands [ ] b) I will consider it twice [ ] c) I am Not interested d) I am not sure [ ]

37. If you have opportunity to lead your community, and your community is a member of one CDB, how will you react to leaving CDBs

a) I will take it with both hands [ ] b) I will consider it twice [ ] c) I am Not interested d) I am not sure [ ]

38 if you community belong to a CDB, how will rate these criterions of the CDBs (Rate appropriately from 1% -100%)

Criterion	**Rate**
Governance	
Inclusiveness	
Transparency	
Participation	
Continuity	
Outcome	

We thank you most sincerely for your time and support in completing this questionnaire.

Name of Enumerator: _____

Signature: _____ Date: _____