報告番号 **※** 第 묶 主 \mathcal{O} 旨 'Perpetrators': Oil-Producing 'Victims' To From Communities, Artisanal Crude Oil Refining and Environmental 論文題目 Pollution in the Niger Delta ZIBIMA Tubodenyefa 氏 名

論 文 内 容 の 要 旨

Crude oil extraction and oil-related environmental pollution as an associated outcome is a major issue of discussion in the Niger delta. This research focused on the dynamics of rural responses to this environmental pollution. The study takes root from existing literature that highlights oil-producing rural communities as victims of the outcomes of extraction in the region. Issues of exploitation, environmental decline and diminishing rural livelihoods that contributes to poverty underpin this position of victimhood. With the objectives of protecting traditional livelihood structures, communities have constantly protested over the polluting activities of oil companies.

With the emergence of artisanal crude oil refining (AIRs) as a systematic activity and a veritable source of oil pollution, explanatory frameworks provided by existing literature have become limited. The key limitation in extant research is that they do not provide explanations for the motivation and basis for individuals' actions that contribute to oil pollution. Neither does the literature capture rural communities' response and reaction to this emergent form of environmental pollution outside formal oil operators. Also, there is a lack of explanation on the connections between AIRs and community response on one hand, and the drivers of the spread of these informal agents of environmental pollution on the other hand. It is relevant at this point to state that this research does not dispute the explanatory properties of extant literature. Nonetheless, from a time shift perspective, emergent trends provide the need to expand the variables of explanation on the linkages between existential conditions, rural community action and oil-related environmental pollution in the Niger delta.

It is within the frame of these limitations that this research set out to understand the changes in rural responses as it condones AIRs as a source of pollution. Specifically, the research tackled the following research objectives:

- 1. To explore the dynamics of individual actions as they contribute to the functionality of artisanal crude oil refineries in rural communities in the Niger delta.
- 2. To explore the nature and dynamics of change in rural communities' response to environmental pollution caused by artisanal crude oil refineries.

In order to achieve these objectives, the following questions are set out:

- 1. Why are artisanal crude oil refineries functional informal economic activities in rural communities?
- 2. Why is there a change in response among individuals in rural communities towards oil-related environmental pollution from artisanal crude oil refining?

Given the study's purpose of investigating behavior changes and outcomes, a qualitative approach was utilized. This allowed for a flexible process in gathering data. The primary data collection instrument was semi-structured interviews. A total of 81 respondents were interviewed. These included artisanal refiners, leaders and members of oil-producing communities, and resource persons in government and oil companies in the region. Secondary data sources included journal articles, research reports, textbooks, newspaper articles and Internet materials. For analyses, narratives from respondents were organized in themes and in combination with secondary data used to answer the research questions.

Chapter two takes a look at issues of oil extraction that underlie the exploitation of oil producing rural communities. It starts with the legal and institutional foundations of oil exploration and extraction and highlights how these lay the foundation for the systematic exploitation of communities. It also highlights how these provisions limit and condition actions related to tackling pollution. This is then followed by further review that focused on the externalities associated with extraction, the impact on rural livelihoods, and the resulting responses and motivations for action over environmental pollution. The limitation of explanations for motivation and nature of action are then emphasized as they relate to AIRs and pollution.

Chapter three gives an overview of the development of the oil industry and the extent of extraction activities in the Niger delta. This is followed by an overview of artisanal refining, its relative history and connections with struggles over oil resource ownership in the region. Here, the legal and institutional aspect of AIRs is addressed as a means of providing insights into its relevance as an economic activity. The last section of this chapter focuses on traditional livelihood trajectories in the region. This is relevant as these livelihood activities are environmental resource dependent and as such are impacted by any form of pollution and environmental damage. The chapter as such lays the background for the analyses that

follows in chapters four and five.

In chapter four, the field data is analyzed and used to answer the first research question. This chapter provides related data as to why AIRs have become functional informal economic activities in communities of operation. This was necessary as the functional dynamics of the activity cannot be divorced from the determinants of the social perceptions surrounding its existence or the environmental damage it produces. The data shows that AIRs is an evolving informal economic activity that builds on itself and in the process, integrates itself into the rural economic systems of these communities. The data shows that the activity is self-perpetuating through increasing entrepreneurial intent of participants. This is further boosted by existing distortions in the distribution of petroleum products, which opens the market and demand for artisanal petroleum products. Also, within this mix of intent and economic distortion are intervening factors such as rural poverty as the activity functions as a source of wage labor and rural income. Again, while reports and observation show the operating environment of AIRs to be volatile, narratives from respondents show that participants have devised adaptive measures in subsisting within this volatile environment. By organizing into financial cooperatives, refiners are able to maintain production processes even when closed down by an operational Joint Military Task force.

More importantly as the data shows, the functionality of AIRs is highly dependent on the utilization of embedded informal networks of interaction. The mobilization from rural networks of interactions and the social capital that support it combine effectively to function as a veritable platform for the operation of AIRs in these communities. However, while pointing out that informal networks of interaction aid the operation of AIRs, there is still the question of matching this informal network role with the negative environmental impact of AIRs. In this regard, when considered, as a source of pollution and not basically an economic activity, the task becomes one of understanding factors that influence interactions to be passive and apathetic to the environmental damage caused by AIRs in these communities.

Chapter five as such focused on the issue of rural perception regarding the environmental damage caused by AIRs. Starting with a comparison of oil companies and AIRs as agents of pollution, the data showed highly affective and socially constructed attitudes towards these two agents of pollution. Perceptions and positions on oil pollution showed to be influenced by derivable benefits and the impact of the source of pollution on rural income. Essentially, while respondents were quite condemning of oil company pollution, it was not so with AIRs. AIRs pollution was generally perceived as a necessary outcome of individuals making livelihoods from crude oil. From the data, this perception is reinforced by a number of factors. One is the institutional failure in regulating oil company pollution and the resulting impacts on rural livelihoods. Another is the collective experience over oil pollution, which has now given

rise to emphasis on income as against the landed resources on which livelihoods have depended.

Such perceptions and the nature of material distribution arising from AIRs combine to shape the prevailing social capital and networks of interaction that feed apathy towards pollution from Artisanal refining. This outcome emphasizes the fact that acting upon prevailing economic and psychological issues influences people's actions that harm or protect the environment. Essentially, networks of interactions in these communities are molded with collective experience over company-induced pollution and the material and non-material relations around AIRs. With these, such networks of interaction now serve as instruments of mobilization, labor and rural income, as well as source of approval and social license. These factors combine to shape rural perceptions and attitudes that condone the environmental damages caused by AIRs. The difference in the nature of relationship between oil companies and communities on one hand and between AIRs and communities on the other, and the nature of distribution each kind of relationship fosters now determine response to oil-related pollution.

The later sections of this chapter also discussed the nature and basis of environmental concern of rural communities as distinct from environmental NGOs whose work have contributed in the publicity of the environmental issues the region. Drawing from the data, distinction was made between NGO environmental concern which embodies perceptions of sustainability and concern for the environment in itself. This is opposed to rural concerns that are shaped by existential and socio-economic conditions. Essentially differentiating these two strands of environmental concerns are the ideas of surviving driving by generating subsistence income to support subsistence consumption. This is opposed to the idea of survival, which is an ultimate outcome espousing sustainability and intergenerational survival. The linkage between both strands becomes one of a marriage of convenience with rural communities functioning as subjects and instruments of NGO environmental advocacy.

The conclusion of the research is contained in chapter six. The study concludes that there is a current and actual shift in the position of these communities from 'victims' of the effects of environmental pollution to perpetrators of environmental pollution. Despite the environmental externalities, also expresses a shift from being victims of exploitation and dispossession to material beneficiaries of direct access to oil resources despite the contested space of resource ownership within which access is embedded. Essentially, this shift is expressed in the movement from:

i. The concern for environmental damage hinged on the destruction of traditional livelihood structures, and the nature of relations this created with oil companies; to

ii. Loss of concern for environmental damage hinged on the economic instrumentation of oil pollution-inducing activities.

The above conclusion is couched within two outcomes. The first is individuals' responding to economic distortions created by limitations in the state's centralized petroleum distribution mechanism. While the limitation of a centralized distribution mechanism forms the primary basis for the viability of artisanal refining, the spread in the activity is made potent by individuals' expressive entrepreneurial intent and adaptive actions. Also, what for most refiners is a livelihood activity, in effect has direct impacts on, challenges and reshapes centralized petroleum products distribution mechanisms of the state as well as state revenue from crude oil sales. The second is communal social constructions that now influence passive community responses to oil-related environmental damage. This study holds that the spread in artisanal refining and the community support it carries expresses a challenge as well as an informal reshaping of the structure of crude oil governance and access in Nigeria.

Nonetheless, the nature of rural response to the activity shows that collective social action in challenging exploitation, social injustices and adapting to livelihood limitations, in the context of access to and resource use, does not always result in rational outcomes. Whereas it is expected for collectives to mobilize localized resources in challenging centralized antagonisms, the outcomes can also be paradoxical as shown in this context. Such mobilizations may service short-term benefits but at the same time create long-term issues as well as reinforce preexisting environmental vulnerabilities.

By reinforcing and accelerating preexisting environmental damage, AIRs systematically represent a vicious cycle and the outlines of a possible poverty trap in these communities. Escaping from environmental and livelihood pressures leads to coping strategies that provide financial cushions but reinforces the environmental livelihood stresses for which coping is directed. This leads to a tragedy of the commons as communal traditional livelihood structures are compromised in the process. Also, not only are environmental livelihood structures compromised but future health statuses. This is also linked to intergenerational distribution effects, as health issues associated with hydrocarbon pollution are latent and takes long periods to manifest. In this regard, such health issues are never considered part of the immediate problem, as neither can they be immediately diagnosed of determined to be present.