

## Understanding Community Characteristics in Resource Development: A Case Study of the Nigerian Oil Sands

Murtala Ibraheem Chindo

Department of Geography, University of Leicester, University Road, Leicester, United Kingdom

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**Abstract:** Mining oil sands is an extensive production process that has a major impact on surrounding communities and the environment. The renewed efforts at exploiting Nigerian oil sands have again raised questions about the potential challenges posed particularly to especially host communities. International best practices suggest that prior and informed consent should be obtained but there is limited mention of first considering the typical attribute of the potential host communities. In order to elucidate an understanding of community structure, this study examines the geography and characteristics of potential oil sands communities in Nigeria. Based on a case study in an area with the largest Bitumen block, the study addresses historical, social, economic and geographic factors capable of motivating or discouraging the most promising path to oil sands extraction and community relations. While remote communities are homogeneous and are overshadowed by development processes and displacement risks, towns are heterogeneous with diverse economic activities ready to host large-scale oil sands projects. This study concludes that paying greater attention to the basic knowledge of community characteristics in resource development may help in creating dialogue and avoiding conflict with the host communities.

**Key words:** Oil sands, communities, irele, accessibility awareness, characteristics, Nigerian oil

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### INTRODUCTION

Nigeria has the largest oil sands/bitumen resources in Africa and is one of the top/leading countries in the world in terms of its significant deposit potential (Meyer *et al.*, 2007). Geological studies (Adedimila, 1987) and physicochemical properties (Ukwuoma, 1999) confirmed that Nigerian bitumen is an important source of energy and an alternative source of hydrocarbon and raw material for the petro-chemical industries. A body of both published and unpublished literature on the Nigerian oil sands tends to focus on the geology, mineralogy and method of processing with limited empirical studies of the potential host communities and their role in creating the resources (Egunyomi and Olatumile, 2010).

In an attempt to develop the Nigerian oil sands resources for economic diversification and growth, a number of strategies are being put in place by the government. Part of the strategy is the delineation of the bitumen belt into blocks for exploitation. It is however, common to find the demarcated blocks located in and around the remote parts of a country often overlapping occupied and protected areas and frequently on traditional lands. This implies that with the commencement of oil sands activities many established communities may be displaced or shattered. Specifically, those communities situated within oil sands-delineated

areas would be most affected. For those that may coexist with the mine, section 100 of the Mining Act 2007 compels a mineral title applicant to make community development agreement for their sustainable social and economic development.

Community engagement literature has focused on developing frameworks and guidelines on how companies can engage host communities (Porter and Kramer, 2006; Esteves, 2008) but has not included the need for an understanding of the characteristics and complexities of the potential host communities. Therefore, any such agreement or corporate plan must take into account the peculiarities of host communities. Egunyomi and Olatumile (2010) highlight that the extent to which grassroots programmes are supported by community members nowadays depends in the first instance on community structure, social organisation of communities and the organised relationships among members of the community. By understanding the communities, investors can deal with any problem that may impinge on an oil sands project. As Switzer (2001) opined, the right to participate in decision-making and benefit sharing can cause conflict between host and operators or the government. Ignoring this basic knowledge leads to confrontation and conflicts and in extreme cases, loss of life and failure of project as documented in the Nigerian oil region. This study presents a general overview of the

characteristics of potential oil sands host communities based on their history and social and economic structure that are capable of motivating or discouraging the most promising path to oil sands extraction and community relations.

Accessibility and the extent of community awareness of oil sands are also considered. In practice, understanding community characteristics ensures timely and smooth project take-off within the bounded period of government approval.

**MATERIALS AND METHODS**

At the outset of the research design phase, the researcher determined that only one of the communities will be studied and further set the study boundaries to include some of the communities represented within the local government area with a higher number of licences. The criteria for the choice of oil sands host communities in Irele have enriched the research and aided interpretation, thereby minimising the possibility of questions regarding generalisation in case study research. Oil sands deposits extend through four states (Ogun, Ondo, Edo and Lagos) of which the Irele local

government area (Fig. 1 ) contains the highest number and the largest proportion of oil sands blocks planned for investment. Thus, a number of communities proportional to the size of the activities will be affected. It should be noted that multiple communities were used for data collection in line with the qualitative research principle and in order to strengthen the reliability of the results. The study was conducted from January to April 2010 in the Irele, Omi, Legbogbo, Ajagba, Ijuba-Ijuoshun, Gboge Gbeleju Oke and River Ofosuohu areas.

The aim of the case study is to understand how the behaviour of the bitumen project and affected communities may influence the creation of oil sands as a resource. The decision to conduct the research as a case study resulted from the desire to investigate resource communities and to elucidate the finer details of the processes of engaging communities in resource development. A case study investigates a phenomenon within a context in an area over a period of time.

The phenomenon is the oil sands (bitumen) and is studied within the context of the surrounding communities. A number of methods can be use as sources of evidence in case study research (Benbasat *et al.*, 1987; Denscombe, 1998; Yin, 2003). Focus groups, interviews,

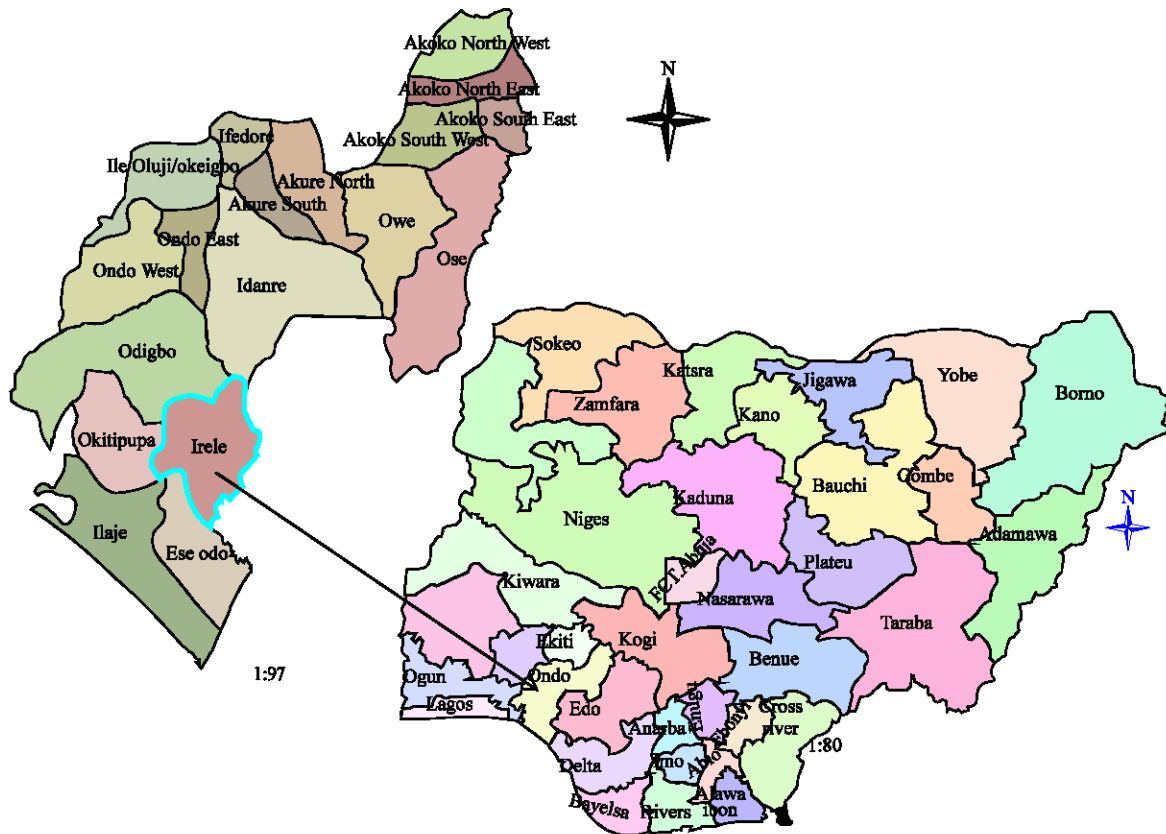


Fig. 1: Map of Ondo state showing the location of Irele local government council

documentary analysis and direct observation are case study protocols that were used in this study. Madsen and Adriansen (2004) have supported the use of multiple methods in geographic research as it offers unique perspectives in relating society and environment in this case from a resource-geography outlook. The methods are considered the most suitable approach for enriching the research in understanding the characteristics of communities hosting mineral resources. The focus group is one of the widely used research tools in a case study. Cameron (2005) claims that focus groups are becoming an increasingly valuable qualitative research tool in human geography subfields. The focus group method explores the complex relationship between the society concerned and the physical environment. For example, Zeigler *et al.* (1996), Skop (2006) and Breen, (2006) have used focus groups in geographic research. Youths, women, community leaders and elders formed the groups. These groups were considered so that sufficient information could be gathered across different population segments of the communities.

In reality though, the theoretical classification of these groups based on identity alone has not been possible in some of the communities. Based on the appeal of the gatekeepers every individual in the community is an inclusive member of the discussion. In such instances, individuals thought to be appropriate for the discussion were identified while the rest are observers or spectators but are free to talk when necessary. Selection of participants by random sampling was thus, not an option in order to eliminate friendship pairs (Babbie and Mouton, 2001) or homogeneity in attitudes (Morgan, 1997) that would lead to difficulty in the selection of participants or result in individuals' resistance to participation in the research. To simplify the focus group process, Fern (2001)'s focus group framework was adopted to illustrate the issues (mainly group composition, setting, cohesion, discussion process and moderator) in the use of this method (Fig. 2). The focus groups provided an opportunity for the communities to present issues and misconceptions, develop questions and offer suggestions on how to develop the resources in their backyard. Nonetheless, limited knowledge of bitumen has constrained the ability of the participants to express themselves and substantiate their claims.

The aim of reporting the locals' understanding of oil sands in their locality was also constrained by a language barrier. Because of low levels of understanding of the English language in communities such as Gboge and Ijuba-Ijuoshun, the researcher relied on the ability of the field guide to moderate the discussions using local dialect.

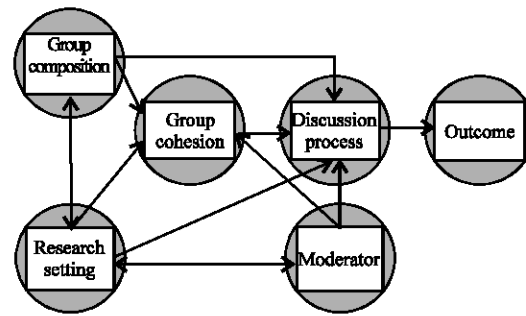


Fig. 2: Framework outlining the conduct of the focus groups, from group composition to the role of the moderator modified by Fern (2001)

Observation was also undertaken in some of the communities to verify allegations made by participants on infrastructure and the oil sands issues such as drilling sites. Follow-up interview participants shared their experiences and perspectives with the research team. The resulting methods have allowed for the capture of the diversity of opinions regarding the state of the oil sands host communities. Data from multiple sources were coded and analysed using the NVivo 8 software where emergent themes formed the findings of the study.

## RESULTS AND DISCUSSION

This study 1st identified the common features of the study area. Historical, social and economic factors in relation to resource extraction are also highlighted. The last two sections examine the degree of isolation/accessibility and awareness of oil sands in the case study communities.

### Case study communities

**Some baseline factors:** The remote communities by virtue of population size, tradition, diversification of economic activities and their degree of isolation are very similar to those categorised by the MMSD (2002) as indigenous mining communities. The planned large oil sands projects cover remote areas where they can displace or coexist with communities that are historically under-prioritised or overlooked by development processes, a typical illustration of what conditional resource communities are. Indeed, half of the case study communities represent some of the most socially, politically and economically marginalised populations around the oil sands belt. This is evidenced by for example, the lack of or diminished access to formal political processes and decision-making structures and basic social services including health and education and available infrastructure such as electricity and tarred roads which to a certain extent contribute to

lower human development, productivity and income. For instance, the distance from Gboge community to the nearest Tarrad road is about 20 km and the closest health centre is about 17 km away. Perhaps, the lack of social amenities is partly related to the uncertainty surrounding their continued existence in their present locations when oil sands exploitation commences.

Communities regarded as towns in the oil sands belt are made up of a heterogeneous group of people containing smaller, different-interest groups that have special needs tied to their personality, resources and livelihoods. The towns such as Irele, Omi and Ajagba constitute long-established communities with a diversified economic base ready to become home to a new mine. Irele, the biggest town in the study area, comprises up to 50,000 people from diverse historical backgrounds all living together. The fact that Irele is the local government headquarters has attracted people from different parts of the state and the country at large. The people are living together in harmony without recording any major recent or historical incidence of internal conflicts involving land tenure disputes or violent confrontations. Of course, remote rural communities are homogeneous and may have <200 people sharing the same ethnicity, family history and beliefs.

**Historical factors:** The communities' lifestyles and economic activities reflect their historical antecedents. Settlement history is among the historical factors that can play a key role in the success or otherwise of resources development. Population history reflects the ancestral origins of the communities. Ijuba-Ijuoshun, Legbogbo and Gboge communities for instance are descendents of a single ancestor inhabitants have a common ancestral origin and are not divided by differences in ethnicity or religion. Over the years, however temporary residents and farmers from neighbouring settlements have joined the community. Living as a remote homogeneous group of people has made them cohesive on issues that affect their community. This quality was demonstrated during the group discussion where individuals-irrespective of gender or age-participated in and contributed to the discussion. The sense of unity exhibited by these groups of communities can be an important factor in negotiating partnership; yet they appear neglected by the government's earlier attempt at developing a consultation programme on the oil sands project.

Community leaders are selected based on lineage, not necessarily age and are advised by a council of elders. Mobilisation arrangement in traditional communities was guided to a large extent by community leadership. When operations begin, migration of people from different ethnic and historical backgrounds can give rise to divisions

between original inhabitants and early settlers on the one hand and later arrivals or even stranger migrants on the other. One of the community leaders alluded to the fact that their communities are open to receive all sorts of migrants.

**Social factors:** It has been noted that the social structure of mining communities and the different interest groups within them can affect resource development processes. The issues of ethnicity-language, family structure and gender are important considerations when relating with these communities. While ethnicity is not a disruptive factor in remote communities, it can have a divisive effect in the multi-ethnic ones. The division along ethnic lines can be compounded by the various ways inhabitants engage in different economic activities and as they compete over available land and other natural resources. For example, farmers, lumber persons and fishermen in the towns compete over limited land resources. More so, high demand for limited land resources becomes problematic if communities are to be relocated.

Religion and language are by far the most important means by which people form an identity within the community. Two major religious practices dominate the communities; Christianity and ancestral religion. Christianity is dominant among the town population with ancestral worship predominant in the remote/rural areas. Ancestor worship is fundamental to the existence of the communities and sanctity is attached to the shrines and groves in rural communities. The languages spoken consist of segregated dialects of Yoruba resemblance, e.g., Ikale, Ilaje and Ijaw. The relevance of language and religion in this study is to unravel whether a part of the population's allegiance lies primarily with the traditional authority or is inclined to those tribal/religious interests outside the community. As observed, there might be a tendency for a particular religious sector in towns to follow the directives of its religious leader rather than to follow instructions from the community leader. In addition, some ethnic groups can have more sympathy for people of their own tribes than for their current place of residence. Community mobilisation for the purposes of bitumen extraction in these situations can prove a complex task considering the existence of these multiple social structures.

This issue, however is not as complicated in remote areas as inhabitants share overriding customary interest. These communities hold respect for community leaders above any other institution. The traditional rulers themselves receive directives based on hierarchy from Obas or Olojas. Religion is considered secondary to tradition in a typical remote setting. Therefore, it is worth

working more intensively to create dialogue through the community leaders in remote areas, even though the study is not ruling out the likelihood of factions within the remote communities. In the recent past, one of the communities experienced conflict when the community leader and council of elders failed to address the needs of their followers when negotiating for bitumen exploration. The reaction of the inhabitants of that community made collective bargaining difficult and consequently the project was abandoned.

The abilities of host communities to mobilise action on bitumen extraction can be viewed from a gender perspective. This is worth considering because the study observed that women in the remote areas are sensitive and passionate about the impact on their means of livelihood in the case that mining commences. Women in the communities engage themselves in all-year-round agricultural production (land clearing, planting, weeding, sowing, harvesting and food processing), mainly for subsistence. They also take part in weaving, fuel-wood gathering, tapping of rubber trees and local and long-distance trade to generate income for the family. Sadly, they are restricted in their contribution to decisions made on issues that affect the community even though, they outnumber the men in some instances. With the non-inclusion of women's representation in discussing oil sands matters, it becomes less likely that they cooperate whereas positive results can be attained if they are included in any dialogue or negotiation.

There are instances where women protest their exclusion from consultation and participation in oil resources extraction. In 2002, a community of women in Nigeria proved that a woman's body has the capacity to bring oil companies operating in the area to the negotiation table. The women from the oil-rich Niger Delta protested in the nude in a desperate attempt to draw attention to the years of community hardship and devastation to the environment and sources of livelihood which affected them the most. They organised themselves across the ethnicities in the Niger Delta, barricaded the facilities and halted production of one of the oil companies, chanting solidarity songs. This action referred to as curse of nakedness in the literature (Ekine, 2008), probably remains the most successful demonstration by women in their demand for participation and remediation of environmental degradation in oil extraction.

If both males and females are involved and their views considered in Community Development Agreements (CDA), they may form stronger ties in ensuring that the management strategy agreed upon works.

**Economic factors:** The earlier section described some of the frequently neglected social characteristics that can stimulate or restrain the development of oil sand resources in the case study area. In addition to historical and social aspects, economic factors are important in resolving the similarity or divergence of interests regarding the development of new resources. Two noticeable and important issues are:

- Differences in economic activities and livelihood strategies
- The extent of economic stratification in the community

Communities' dependence on natural resources for their livelihood strategies has shaped their attitudes to those resources. Those in the remote areas are farmers and depend almost entirely on plantations and annual crops for food and drink, e.g., for tea, medicine and fuel wood. The tree crops are also used as animal feed and for building, furniture and fencing purposes. Conversely, some people such as shop keepers, petty traders and civil servants have relatively little direct use of or dependence on plantations and crops. These various economic engagements provide an incentive to protect the available resources and to resist any plans that would ultimately terminate this quest for survival.

People's interest in the development of new resources also varies depending on their economic activity and well-being. Considerable evidence suggests that people from remote areas are poorer and often depend more heavily on natural resources such as land, water and forestry to meet their sub-sistence needs than do people who are wealthier. Because of over-reliance on these resources, they have stronger opinions about the forfeiture of primary land to any activity such as mining that does not directly provide for their needs. This is less so in towns as people have the opportunity to engage in trading, artisan jobs, civil service and self employment in addition to exploiting available land, water and forestry resources. Farming is the major occupation of the people and especially for men but women also own and help in the farms and are engaged in petty trade. Surplus farm produce is sold by the women in exchange for household consumables. One way to diversify, the already existing economies of potential resource towns is to provide infrastructure (such as water, roads and electricity) that will promote economic growth and attract manufacturing to the region (Abdel-Rahman, 2000).

In recent years, tenant farmers have increasingly become a major concern to the indigenous communities, especially in the areas of perennial crops like cocoa, kola

nut, palm trees and rubber plantations. Tensions heighten in situations of displacement, relocation and compensation for farm lands used by the tenants as bitumen development projects commence. As with gender considerations (discussed earlier), dialogue among the various economic strata deserve attention in the oil sands planning/permitting process, otherwise this issue can be an incentive for some groups to disobey and create conflict.

**Accessibility within the case study communities:** The topography of the bitumen area has shaped accessibility to the communities. A number of the communities are easily accessible by land, however a few do encounter problems with access. The most difficult terrain is the coastal areas which are only accessible by small canoes and boats that are fitted with outboard engines. Accessibility is made more difficult by the highly invasive water weeds which constitute a serious hazard to boats, canoes, swimmers and fishermen alike. Accessibility is problematic as most of the roads in the hinterland are in a deplorable condition and further exacerbated by erosion. In the hinterland, accessibility is by roads (tarred and non-tarred) as well as bush tracks and footpaths. Ode-Irele, Omi and Legbogbo are linked by a tarred road while linear settlements occur along the road network that stretches from Ore to Igbokoda. Non-tarred roads are created by timber trucks and those used for drilling access by either the Bitumen Project Implementation Committee (now scrapped) or past investors. Indeed, many trucks can be seen loading logs from the nearby forests for urban saw mills. Some of the communities simply rely on truck ways and footpaths for mobility. These roads are more accessible during the relatively drier season of the year. Some non-tarred roads lead to river channels that are without bridges, thereby posing serious hindrances to vehicular mobility.

**Community awareness of oil sands:** Some evidence exists to show that since the 1990s, communities are becoming increasingly sensitive to oil sands extraction and have tended to form a common framework within which to relate with stakeholders, through a well established system of traditional authority in which traditional rulers and chiefs, religious institutions and community groups play an important role. An example of the traditional organisation indicates that consultation is communally strengthened and supported by all sub-systems including religious and cultural institutions. It appears that this traditional system of authority flow is fundamental to general community awareness and partnership among stakeholders and oil sands host communities.

When the government was seen to be committed to developing oil sand resources, a number of pro-community NGOs and community-based organisations that are operational in the Niger Delta region became active in sensitising the host communities and encouraging the people to demand their rights in accordance with the law. One of these NGOs was the Environmental Rights Action (ERA) group which organised a national consultation on bitumen exploration in 2003. Others are the Council of traditional chiefs and several youth movements. Some of these voluntary efforts, although presently inactive have worked with the media to create awareness about the negative consequences of oil sands extraction. The traditional rulers had expressed their apprehension about the outcomes of bitumen activities at various forums. The dissolution of the BPIC in 2005 contradicted government promises in the past that the project had come to stay. Angered by this development, the traditional rulers took an unequivocal position and have since been demanding explanations from the government as to why the aspirations of the people were scuttled.

As an institution, the traditional rulers are well informed about the possible gains and costs of bitumen extraction in their locality. As sources of information to their people, it would be expected that awareness about bitumen has reached the most remote community in the state. Sadly, this is not often the case for instance, Legbogbo community knows bitumen but only by its physical appearance. This therefore, indicates that the level of literacy of a particular community leader to an extent limits his understanding of bitumen and subsequently, his ability to transmit information about bitumen to his people. As an example, Oba Claudius Olanrewaju-Lebi was educated up to postgraduate level in the United Kingdom, worked and relocated to Canada and United States before retiring home to become a traditional chief. He is using his understanding of oil sands extraction in Canada to advocate for the adoption of similar best practices for his communities. He is playing a leading role in educating other traditional and community leaders while at the same time pursuing the government to develop the resources because of the negative impacts being experienced, particularly in areas where subsurface bitumen oozes out from beneath the earth.

In one of the group sessions, the chiefs recalled with nostalgia their struggle with government regarding the welfare of their people and environmental protection. For example, the government has confirmed its commitment in resettling communities that are affected by bitumen extraction if the Environmental Impact Assessment (EIA)

report conducted by an independent body determines that this is necessary. Issues of compensation are not agreed upon until the environmental assessment is determined.

The community leaders are also concerned about bitumen extraction not getting in the way of family structure, employment or family commitment. The towns are aware of the issues concerning bitumen and how it can affect their welfare. Remote communities in many cases only became aware of this when drilling rigs arrived in their communities. Two such instances are Gboge and Legbogbo. Youth groups in Legbogbo have very limited understanding of the potentials of the resources in their locality and as such, they are restricted in how they express the view of the community. As an exception, one of the rural communities has engaged a lawyer to document all their concerns and develop a framework for any agreement before the bitumen project takes off in the community. Typical comments regarding awareness of bitumen included:

I know tar sand very well in Canada. It has affected so many communities in Edmonton and has led to fast development of the area. I have interacted with investors and hope my kingdom looks like Edmonton when extraction finally start

We see it on the farms but we do not know what to do with it and how it will affect us. When they were doing the borehole, bitumen came out and disturbed s them from drilling. So, they went away and we do not have water from borehole again

One of the reasons for the gap in information is because the bitumen project itself had suffered a setback. Another reason is that the chiefs (Obas) have not designed programmes for community-by-community education on the costs and benefits of bitumen. This action underlines the importance of involving the people in all development matters that concern them.

### **CONCLUSION**

The results of the study confirm that the size and location of oil sands blocks is likely to coexist with displace or shatter existing communities. The findings suggest that community engagements and relations in resource extraction can be facilitated by understanding and paying closer attention to host community circumstances and characteristics. The results also suggest that local circumstances such as their historical antecedence, social organisation, levels of economic

activities and dependence on natural resources, their geographical distribution and degree of isolation and the extent of awareness, affects and determines communities' resilience to new resource extraction.

The major finding, however is that the communities are socially, politically and economically marginalised, evidenced by a lack of basic social amenities and physical infrastructure and a near absence of participation in political processes and in matters of oil sands that would affect their future livelihood.

This study therefore, contends that the concept of community characteristics has the potential to help mining stakeholders gain a complete understanding of how to conduct dialogue with the host communities on how the activity is likely to affect their livelihood and the surrounding environment. Not only is this knowledge, more likely to benefit resource-geography, academics and potential oil sands investors but it may also offer guidance to the communities on how to use their diversity in considering what actions they can take in order to maintain their sustainability and ensure maximisation of the benefits of oil sands production.

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